# **Blackfoot Travel Plan**

# Final Environmental Impact Statement Volume 2 – Appendices





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# Appendix A – Forest Plan Direction and Travel Management Criteria for Designation of Roads, Trails and Areas (36 CFR 212.55)

#### Forest Plan Direction

The Helena National Forest Plan (Forest Plan, USDA Forest Service 1986, as amended) provides management direction for the planning area. The Forest Plan divides the Forest into management areas (MAs) – each with different goals, resource potentials, and limitations. Management areas are not single, contiguous units; they consist of many individual pieces, each classified with one of the specific management area prescriptions.

**Forestwide goals, objectives, and standards** are found in Chapter II of the Forest Plan (pp. II-1 to II-36). The Plan also provides goals for each of the 14 management areas (MAs). These MAs are described in Chapter II of the Forest Plan.

The Forest Plan includes direction for road and trail management and provides important guidance for this project. Forestwide direction that is applicable to this project includes:

- Goal 15 (Forestwide II/2) develop and implement a road management program with road use and travel restrictions that are responsive to resource protection needs and public concerns
- ♦ Objectives, Facilities (Forestwide II/6) transportation facilities such as roads and trails will be constructed, managed, and maintained to cost effectively meet the Forest land and resource objectives and visitors' needs. The Forests transportation system will be coordinated and integrated with public and private systems to the fullest extent possible....soil and water conservation practices will be applied...to ensure that Forest water quality goals will not be degraded
- ♦ Forestwide Standards, Facilities Road Management (Forestwide II/31-32) the criteria to be used for road, trail or area restrictions are safety, resource protection, economics, conflicting uses, facility protection, public support, land management objectives.

Management areas within the Blackfoot Travel Planning Area include: A1, L1, L2, M1, N1, P1, R1, T1, T2, T3, T4, T5, W1, W2, and other lands. Table A- 1 includes a description of each, and the management goals included from the Forest Plan. These goals, standards and guidelines for each of these management areas would be followed for this project; where there are differences or clarifications needed, these are discussed as part of the alternative descriptions in chapter 2 and in the resource-specific section in chapter 3 (i.e., there may be a need for Forest Plan amendments related to trails within the R1 (proposed research natural areas) and N1 management areas (undeveloped land for dispersed recreation). Chapter 3 of this document provides a summary of how Forest Plan direction for each of these management areas (as well as Forestwide direction) would be met for each alternative, by resource. The project record provides additional detail on how management area-specific goals, standards and objectives apply to this project.

Table A- 1. Forest plan management area descriptions and goals

Management Area	Description	Management Goal	
A-1 (III/3)	These sites are the ranger stations, guard stations, and service sites administered by the Helena National Forest.	Provide and maintain sites or facilities necessary for administering the Helena National Forest.	
L1 (III/11)	These lands are within grazing allotments and are generally nonforested consisting of bunchgrasses, sage and other shrubs or sparsely forested areas with Douglasfir or ponderosa pine as the dominant species. Slopes vary from 10 percent to greater than 60. This management area contains inclusions of elk calving areas, hiding cover, and summer range, but excludes identified elk winter range.	Maintain or improve vegetative conditions and livestock forage productivity.  Optimize livestock production through intensive grazing systems, while maintaining other resource uses.	
L2 (III/12)	This management area is land which is both identified big game winter range and within existing grazing allotments. The land is generally nonforested with bunchgrass, sage and other shrubs or sparsely forested areas of Douglas-fir and ponderosa pine. The area is usually at lower elevations in the foothills and has slopes from 10 to 60 percent. The area provides thermal and hiding cover on identified winter range.	Maintain or improve range vegetative conditions and forage production for livestock and elk.	
M-1 (III/5)	These areas are nonforested and forested land where timber management and range or wildlife habitat improvements are currently uneconomical or environmentally infeasible. The area is scattered throughout the Forest and is found at all elevations and slopes ranging from 10 percent to over 60 percent. The parcels range in size from 20 to 500 acres.	Maintain the present condition with minimal investment for resource activities, while protecting the basic soil, water, and wildlife resources.	

Management Area	Description	Management Goal
N1 (III/8)	This management area consists of three proposed research natural areas (RNA) identified on the Helena National Forest to meet Regional targets. Forest Plan Table 11-2 on page 11-8 lists the Forest RNA targets. The three proposed areas fill 18 of the 26 targets. Target ecosystems not yet represented by a proposed RNA are: PSME/VAGL (Douglas-fiir/blue huckleberry), PSME/CARU (Douglas-fiir/blue huckleberry), PSME/CARU (Douglas-fiir/blue huckleberry), STCO/BCGR (needle and thread/blue grama), RHTR/AGSP (skunkbrush/bluebunch wheatgrass), RHTR/FEID (skunkbrush/Idaho fescue), beaver ponds, thermal springs. As more target ecosystems are identified on the ground, more RNAs could be proposed and added to this management area.  The three areas on the HelenaRed Mountain, Granite Butte, and Kingsberry Gulchtypify important ecosystems in southwestern Montana.	Provide areas for research, observation, and study of undisturbed ecosystems that typify important forest, shrubland, grassland, alpine, aquatic, and geologic types on the Helena National Forest.
R1 (III/24)	This management area consists of large blocksgreater than 3,000 acres—of undeveloped land suited for dispersed recreation. These Lands include Mount Helena, Trout Creek Canyon, Indian Meadows, Nevada Mountain, Camas Lakes, and Silver King/Falls Creek. The Silver King/Falls Creek area has been identified by the USGS as having a high potential for oil and gas. These areas provide opportunities for semi-primitive non-motorized recreation and are characterized predominately by natural or natural appearing environment where there is a high probability of isolation from man's activities.	Provide a variety of semi-primitive and primitive non-motorized recreation opportunities. Provide for maintenance and/or enhancement of fishery, big game, and nongame habitat grazing allotments, visual quality, and water quality.
T1 (III/30)	This management area consists of lands available and suitable for timber management with varying physical and biological environments as determined by soil, slope, aspect, elevation and climatic factors. Vegetation varies from ponderosa pine on the drier sites to spruce in the more mesic sites with nearly all slopes represented. Although this area consists primarily of suitable forest land, there are inclusions of nonforested and nonproductive forest lands. This area includes some small ponds and marshes that are considered unique to this part of Montana.	Provide healthy timber stands and optimize timber growing potential over the planning horizon.  Emphasize cost- effective timber production, while protecting the soil productivity. Maintain water quality and stream bank stability. Provide for dispersed recreation opportunities, wildlife habitat, and livestock use, when consistent with the timber management goals.

Management Area	Description	cription Management Goal	
T2 (III/34)	This management area occurs where big game winter range and timber values are present. Most of the area is in lower elevations, below 6,000 feet. Vegetation varies from ponderosa pine on the dry south aspects to spruce in the riparian portions of the management area. Although this area consists primarily of forested lands; there are inclusions of grassland interspersed throughout.	Provide for the maintenance and enhancement of big game winter range. Harvest timber on a programed basis, consistent with big game winter range values. Emphasize cost- effective timber production, while protecting the soil productivity. Maintain water quality and streambank stability. Provide for other resource uses where compatible with timber and big game winter range management goals.	
T3 (III/38)	This management area consists of lands that have primary forage, resting, and security characteristics that provide important spring and summer requirements for all big game species. These lands also supply the habitat needs of a wide variety of nongame forest dwelling wildlife. In addition, lands within this management area contain productive timber sites available and suitable for timber management. The variation in elevation, topography, slope, and aspect, in addition to the often abundant surface water (seeps, springs, etc.) make these areas rich in species diversity and total numbers within species groups. This area also has inclusions of small grassland parks.	Maintain and/or enhance habitat characteristics favored by elk and other big game species. Provide for healthy timber stands and a timber harvest program compatible with wildlife goals for this area. Emphasize cost- effective timber production, while protecting the soil productivity.  Maintain water quality and stream bank stability. Provide for other resource objectives where compatible with the big game summer range and timber goals.	
T4 (III/42)	This management area is productive timberland within the sensitive viewing area of many major travel routes, use areas, and waterbodies. Vegetation varies from ponderosa pine on the drier sites to spruce in the moistest areas. Nearly all slopes and aspects are represented. Most of the area is suitable forest land, but there are some inclusions of nonforested and nonproductive forest land.	Maintain healthy stands of timber within the visual quality objective of retention and partial retention. Provide for other resource uses as long as they are compatible with visual quality objectives. Emphasize cost-effective timber production, while protecting the soil productivity. Maintain water quality and stream bank stability.	
T5 (III/46)	This management area consists of suitable timber stands interspersed with natural openings, generally with existing livestock allotments. Forage is provided by natural meadows and transitory range. It encompasses lower elevations and dry sites usually on the fringes of native grasslands.	Increase production and quality of forage. Manage timber sites cost effectively. Provide for healthy stands of timber and timber products consistent with increasing quality and quantity of forage. Emphasize cost-effective timber production, while protecting the soil productivity. Maintain water quality and streambank stability. Provide for other resource uses that are compatible with the other goals.	

Management Area	Description	Management Goal
W1 (III/50)	This management area contains a variety of wildlife habitat ranging from important big game summer range to big game winter range. It has a variety of physical environments including riparian, calving or fawning areas, and hiding cover. All slopes, aspects and elevations are represented as well as a variety of vegetation ranging from grasslands to densely timbered areas.	Optimize wildlife habitat potential, including old growth, over the long term. Provide for other resource uses, if they are compatible with wildlife management goals.
W2 (III/53)	This management area consists of riparian and other lands that have forage, resting, and security characteristics provide important spring, summer, and fall requirements for all big game species. Range allotments are in parts of the area. The variations in elevation, topography, slope, and aspect make these areas rich in species diversity.	Maintain and/or enhance habitat characteristics favored by elk and other big game species during spring, summer, and fall. Provide habitat diversity for nongame wildlife species. Provide forage for both big game and livestock. Provide for other resource objectives as long as their uses are compatible with the wildlife and livestock objectives.

#### Forest Plan Amendments Relevant to the Blackfoot Travel Plan

**Amendment 12,** January 1996.Deletes Kingsberry Gulch as a proposed Research Natural Areas (RNA) and adds Indian Meadows and Cabin Gulch as new proposed RNAs.

Kingsbury Gulch was reviewed on the ground and was determined that it did not represent the ecological conditions needed to complete the natural areas system and where human disturbance is not evident for the past 50 years. Cabin Gulch and Indian Meadows met the selection criteria for RNAs and contain the habitat types listed in the Forest Plan.

**Amendment 14,** May 1996. Provides interim direction to protect habitat and populations of resident native fish outside of anadromous fish habitat in (Eastern Oregon, Eastern Washington, Idaho and) Western Montana.

The interim direction—the Inland Native Fish Strategy—applies except where PACFISH or the President's Plan [Northwest Forest Plan] apply. The direction is in the form of riparian management objectives, standards and guidelines, and monitoring requirements. The standard and guidelines apply to an array of resources: timber, roads, grazing, recreation, minerals, fire/fuels and general riparian area management; watershed and habitat restoration, and fisheries and wildlife restoration. It identifies priority watersheds and identified watershed analysis as a prerequisite for determining which processes and parts of the landscape affect fish and riparian habitat.

**Amendment 16**, July 1997. Adds Indian Meadows and Cabin Gulch as new Research Natural Areas and deletes the Kingsbury Gulch RNA. In addition, one area, Granite Butte is proposed for designation.

The associated management area designation changes were identified and changes in the Forest plan wording or chapters II and III were identified. In particular, it added a recreation standard that states, "Dispersed motorized recreation such as ATVs, OHVs, and over-snow vehicles will not be allowed. Area closures are recommended."

Also, Establishment reports have been prepared for each designated area.

**Amendment 19**, October 2000. Changes Forest Plan forestwide management standards for locatable minerals (Forest Plan page II-27) as a result of the decision made from the Final Rocky Mountain Mineral Withdrawal EIS.

The amendment adds acres withdrawn on the Lincoln Ranger District to Appendix Q of the Forest Plan.

**Amendment 20,** January 2001. Off-Highway Vehicle Record of Decision and Plan Amendment for Montana, North Dakota and portions of South Dakota.

The amendment restricts yearlong, wheeled motorized cross-country travel with a few specific exceptions. Subsequent site-specific planning would result in designation of road and trails for their appropriate use.

# Forestwide Forest Plan Standards Relevant to the Blackfoot Travel Plan

**Forestwide Forest Plan standards** for each resource that are relevant to travel management planning are identified in the following forest plan consistency tables. Standards not applicable to travel management planning are not included. Each resource report addresses Forest Plan consistency.

Table A- 2. Forestwide forest plan standards and consistency determinations

Recreation Standards	If standard applies, how is standard being met, and where in the project file is the documentation?
New campgrounds and other developed recreation facilities, such as boat ramps or picnic areas, will generally not be constructed. Continue to maintain existing developed sites, but emphasize providing dispersed recreation opportunities. Removal of existing sites may be necessary, in some cases, due to site deterioration or excessive maintenance cost.	Action alternatives propose new developed trailheads. These would be minimally developed with native or gravel surfaces, signage, and potentially bulletin boards and toilets. These types of developments are sanctioned in the Forest Plan, depending upon the Management Area, if a need is identified.
Encourage ski-touring trail development by locating and marking additional trails and by encouraging the private sector to develop trails.	This Blackfoot Travel Plan does not propose new cross-country ski trails.
Complete a Recreation Opportunity Guide (ROG) for each Ranger District, to make recreation opportunities more visible to the public.	Forest ROGs have been replaced with website information about recreation opportunities.

#### If standard applies, how is standard being met, and where in the project file is the **Recreation Standards** documentation? 4. A specific Continental Divide National Scenic A Continental Divide National Scenic Trail Trail (CDNST) route will not be identified prior to Comprehensive Plan was approved in 2009. The approval of the comprehensive plan being Helena National Forest does not have a separate prepared by the Forest Service and the Secretary management plan for the CDNST. of Agriculture's Advisory Council. Once the Alternatives 1 and 2 would continue to manage the comprehensive plan is approved, the portion of the CNDST in the planning area as it is management direction will be incorporated further currently with a mix of motorized and non-motorized in this plan. Based on the Comprehensive Plan, a use. This is somewhat inconsistent with the more detailed analysis will be completed to show Comprehensive Plan that encourages nontrail segments, objectives and specific route motorized use. locations. The legislation authorizing the CDNST Alternatives 3 and 4 would manage the CDNST specifically intended that the trail would not primarily for non-motorized use but approximately 1 adversely affect or preclude the application of mile of trail that is currently located along an existing normal management practices on lands adjacent road would continue to be managed for seasonal to or within the trail corridor (both public and motorized use. Because this approximately 1 mile private). It is not the intent of the legislation that a motorized segment is on a road that existed prior to separate "management plan" be developed for November 10, 1978, continued motorized use here the CDNST, but to provide for the development would be compliant with the Comprehensive Plan. and management of the trail as a management The remainder of the CDNST would be open to a practice which is integrated into the overall mix of non-motorized uses depending upon the prescription for the land through which the trail segment. This is consistent with the Comprehensive passes. plan. The portion of the CDNST that occurs within management area N1 (Granite Butte) would be managed for motorized use under alternative 2 and non-motorized use under alternatives 3 and 4. The Forest Plan would be programmatically amended to allow management of this section of trail within this N1 management area under alternatives 2, 3 or 4 and therefore would be consistent with the Forest 5. Emphasize "Pack-In Pack-Out" use in dispersed The Blackfoot Travel Plan does not propose any recreation areas and in wilderness to reduce changes to the "pack-in-pack-out" system. resource impacts and management costs. 6. Provide information to users of remote areas and The Blackfoot Travel Plan does not address dissemination of public information regarding wilderness about potential conflicts with humans and bears and proper camping methods to avoid potential conflicts between humans and bears. such conflicts.

#### Forestwide Cultural Resources Standard docume

# The Forest will undertake a systematic program of cultural resource inventory, evaluation, and preservation aimed at the enhancement and protection of significant cultural resource values, as prescribed for Federal Agencies by Section 106 of the National Historic Preservation Act and 36 CFR 800. Cultural resource sites evaluated as significant will be preserved in place whenever possible. When such resources are threatened by project development, an effort to avoid or minimize adverse impact by project redesign will be made. When avoidance is judged by the

# If standard applies, how is standard being met, and where in the project file is the documentation?

The Forest Plan requires the integration of cultural resources in project planning and forest management. Compliance inventory, evaluation of site significance and project effect, consultation with the Montana State Historic Preservation Office and Tribal Historic Preservation Officers, and implementation of design features for project-affected cultural resources would comply with the National Historic Preservation Act and its implementing regulations in 36 CFR 800, as well as Helena National Forest Plan (USDA 1986) standards and guidelines. Therefore, the results of

#### **Forestwide Cultural Resources Standard**

Forest Supervisor to be imprudent or infeasible, the values of the site will be conserved through proper scientific excavation, recordation, analysis, and reporting. An inventory survey for cultural resources will be made for all significant ground-disturbing activities. Forest inventory efforts will be focused in three areas including: a. Areas where specific project activities, such as timber sales, road developments, range improvements, or mineral development activities, result in significant ground disturbance.

- Large areas where substantial development impact is anticipated, such as oil- and gasplanning areas.
- c. Areas where formal archaeological surveys may provide management data that are broadly applicable to ecologically similar areas and which will facilitate the development of predictive models capable of addressing issues of cultural site density, distribution, and significance. The Forest will encourage scientific research by privately funded universities as a means of acquiring additional inventory and interpretive data. Such projects will be coordinated with the State Historic Preservation Officer and the Advisory Council on Historic Preservation. Cultural resource site information is exempt from disclosure under the Freedom of Information Act. Following Forest Supervisor written approval, site locational data may be released on a need-toknow basis to consultants, universities, or museums. Discovered cultural resources will be evaluated in relation to published Advisory Council on Historic Preservation (ACHP) criteria for eligibility to the National Register of Historic Places. Cultural resource sites determined eligible will be nominated to the National Register. The Forest will coordinate cultural resource issues and concerns with the appropriate Native American groups to ensure that Forest management activities are not detrimental to the protection and preservation of Native American religious and cultural sites, treaty rights, and religious and cultural practices. The Forest will enhance and interpret significant cultural sites for the education and enjoyment of the public when such development will not degrade the cultural property or conflict with other resource considerations. Known significant cultural resource sites on the Forest will be protected from inadvertent or intentional damage or destruction. Portions of the Lewis and Clark National Historic Trail are on the Helena Forest. Some interpretive signing has been placed along the trail. Normal management practices can still access land adjacent to or within the trail corridor, however, project activities will be conducted to minimize disturbance to the cultural site.

If standard applies, how is standard being met, and where in the project file is the documentation?

this travel planning on cultural resources would remain within Forest Plan standards because NHPA Section 106 would be completed prior to implementation and mitigation would be done to avoid adversely effecting cultural resources within the planning area.

Current Forestwide Big Game Standards			If standard applies, how is standard being met, and where in the project file is the documentation?
On important summer and winter range, adequate thermal and hiding cover will be maintained to support the habitat potential.			Standard is met. Thermal cover and hiding cover are present throughout the planning area and should not be affected as a result of project implementation.
include a cove	ntal analysis for project r analysis. The cover e on drainage or elk h	analysis	Standard is met. The cover analysis is completed at the elk herd unit scale.
3. Subject to hydrologic and other resource constraints, elk summer range will be maintained at 35 percent or greater hiding cover and areas of winter range will be maintained at 25 percent or greater thermal cover in drainages or elk herd units.		e maintained r and areas of 5 percent or	Standard is met. Thermal cover and hiding cover should not be affected as a result of project implementation. There are new construction routes proposed in hiding cover; however, new routes would be designed such that thermal and hiding cover would continue to function accordingly.
<ol> <li>Implement an aggressive road management program to maintain or improve big game security. To decide which roads, trails, and areas should be restricted and opened, the Forest will use the following guidelines developed with the Montana Department of Fish, Wildlife, and Parks (MFWP). The Forest visitor map will document the road management program.</li> <li>Road management will be implemented to at least maintain big game habitat capability and hunting opportunity. To provide for a first week bull elk harvest that does not exceed 40 percent of the total bull harvest, roads will be managed during the general big game hunting season to maintain open road densities with the following limits.</li> </ol>		game Is, and areas Forest will ed with the e, and Parks document ented to at ability and if irst week d 40 percent e managed season to	Two out of eight herd units currently meet Standard 4(a) and only those same two would continue to meet Standard 4(a) under all action alternatives. This situation will be addressed in a separate Forest Plan amendment.
Existing Percent Hiding Cover (according to FS definition of hiding cover) (1)  Existing Percent Hiding Cover (according to MFWP definition of hiding cover) (2)  Max Open Road Density		Max Open Road Density	
56	80	2.4 mi/mi (2)	
49	70	1.9 mi/mi (2)	
42	60	1.2 mi/mi (2)	
35	35 50 0.1 mi/mi (2)		
<ul><li>(1) A timber stand that conceals 90 percent or more of a standing elk at 200 feet.</li><li>(2) A stand of coniferous trees having a crown closure of greater than 40 percent.</li></ul>			
The existing hiding cover to open road density ratio should be determined over a large geographic area, such as a timber sale analysis area, a third order drainage, or an elk herd unit.		graphic area,	

	If standard applies, how is standard being met, and where in the project file is the
Current Forestwide Big Game Standards	documentation?
4b. Elk calving grounds and nursery areas will be closed to motorized vehicles during peak use by elk. Calving is usually in late May through mid-June and nursery areas are used in late June through July.	Standard is met. Elk calving is widely scattered across various parts of the planning area. A seasonal restriction is applied to acquired grounds in the Bartlett area to protect elk calving. If any additional nursery grounds or calving areas are identified during this and subsequent projects, they will be protected according to the standard.
4c. All winter range areas will be closed to vehicles between December 1 and May 15. Exceptions (i.e., access through the winter range to facilitate land management or public use activities on other lands) may be granted.	Standard is not applicable. Travel management during the winter is not included in this proposal.
4d. At restricted roads, trails, and areas, signs will be posted which tell: (1) type of restriction; (2) reason for the restriction; (3) time period of restriction; and (4) cooperating agencies.	This would occur during the implementation phase of the project.
4e. Roads that will be closed will be signed during construction or reconstruction telling the closure date and the reason for closure.	This would occur during the implementation phase of the project.
4f. Enforcement is a shared responsibility. Enforcement needs will be coordinated with the MFWP.	Travel planning meetings with MFWP resulted in coordination discussions between both agencies. Implementation of the travel plan would be coordinated with MFWP post decision and prior to and during implementation.
4g. Opened Forest roads will normally have a designed speed of less than 15 miles per hour. Exact design speeds will be determined through project planning. Loop roads are not recommended and will be avoided in most cases.	Posting of speeds will occur during project implementation. Some loop trails will be adopted to avoid pioneering of new trails.
4h. The Forest Road Management Program will be developed in conjunction with MFWP and interested groups or individuals. The Road Management Program will contain the specific seasonal and yearlong road, trail, and area restrictions and will be based on the goals and objectives of the management areas in Chapter III of the Forest Plan.	Standard is met. Travel planning meetings were conducted with FWP. See meeting notes and alternative descriptions.
4i. Representatives from the Helena Forest and MFWP will meet annually to review the existing Travel Plan.	This will occur during the implementation phase.
5. On elk summer range the minimum size area for hiding cover will be 40 acres and the minimum size area on winter range for thermal cover will be 15 acres.	Standard is met. Hiding cover is mapped only where it occurs in 40-acre patches or more. Thermal cover is mapped only where it occurs in patches of 15 acres or more.
Montana Cooperative Elk-Logging Study     Recommendations, in Appendix C, will be     followed during timber sale and road construction     projects.	Standard is met. The applicable sections of the Recommendations include (1) Road Construction and Design; (2) Road Management; and (3) Area Closures During the Hunting Season. Several roads are proposed for closure or application of a seasonal restriction to improve elk habitat. See the alternatives descriptions.
7. Inventorying and mapping important big game summer/fall and winter ranges will continue.	Standard is met. The Helena National Forest Wildlife Staff continue to work with Montana Fish, Wildlife, and Parks Area Biologists to update our

Current Forestwide Big Game Standards	If standard applies, how is standard being met, and where in the project file is the documentation?
	big game range maps.
8. Any proposed sagebrush reduction programs will be analyzed on a case-by-case basis for the possible impact on big game winter range.	Not applicable.
9. Occupied bighorn sheep and mountain goat range will be protected during resource activities.  Project plans for livestock, timber, or other resource development will include stipulations to avoid or mitigate impacts on their range. Conflicts between livestock and these wildlife species will be resolved in favor of the big game.	Not applicable to bighorn sheep which are not present in the planning area. Action alternatives would provide additional protection to portions of the mountain goat range.
Moose habitat will be managed to provide adequate browse species diversity and quantity to support current moose populations.	Not applicable; no habitat will be modified.

Forest Wide Threatened and Endangered Wildlife Species Standards	If the standard applies, how is it being met, and where in the project file is the documentation?
1. A biological evaluation will be written for all projects that have potential to impact any T&E species or its habitat. All evaluations will address each projects potential to adversely modify a listed species habitat or behavior. If an adverse impact is determined, mitigation measures will be developed to avoid any adverse modification of a listed species habitat or behavior. If all possible mitigation measures do not result in a no affect determination, then informal and/or formal consultation with the U.S. Fish and Wildlife Service will be initiated.	The analysis of TES species in the Wildlife Specialist's Report serves as the Biological Evaluation for this travel planning effort. A separate Biological Assessment of T&E species will be prepared and submitted to the USFWS for consultation.
2. Grizzly bear—Apply the guidelines in Appendix D to the Management Situation 1 and 2 (referred to essential and occupied prior to 1984) grizzly bear habitat on the Forest (see map in Appendix D). Initiate field studies in undesignated areas known to be used by grizzlies, to determine if the areas should be designated as grizzly habitat. Until sufficient evidence is available to determine the status of these areas, manage them according to Appendix E, Grizzly Management Guidelines Outside of Recovery Areas.	Management Situation guidelines are applied and addressed in project analysis.  Coordination with MFWP is ongoing to evaluate grizzly bear use outside the wilderness and to determine appropriate management levels.
3. In occupied grizzly habitat, to minimize man- caused mortality the open road density will not exceed the 1980 density of 0.55 miles per square mile, which was determined to have little effect on habitat capability.	Open road densities were analyzed for this project and all alternatives are below 0.55 miles per square mile. Action Alternatives decrease open road densities.
4. Research activity on grizzly bears or their habitat will be reviewed by the Research Subcommittee of the Interagency Grizzly Bear Committee.	No research proposals or activities for grizzly bears are anticipated in the near future and coordination would occur for any future research.
5. Bald Eagle and Peregrine Falcon – Continue working with the MFWP, the USFWS, and the BLM to identify nesting and wintering areas. Identify nest territories and roost sites, and protect both from adverse habitat alteration. [Guidelines	Monitoring of peregrine falcon eyries and bald eagle nests has been ongoing on the HNF since the late 1980s. Both species have been removed from the endangered species list in recent years. Although this standard no longer applies, neither

Forest Wide Threatened and Endangered Wildlife Species Standards	If the standard applies, how is it being met, and where in the project file is the documentation?
for identifying bald eagle habitat are in the Wildlife Planning Records.] Powerlines constructed in bald eagle or peregrine falcon habitat will be designed to protect raptors from electrocution. See Appendix D for bald eagle and peregrine falcon habitat maps.	species is affected by Travel Plan alternatives.
6. Gray Wolf – With the USFWS and MFWP, investigate reported gray wolf observations to confirm or deny gray wolf presence. If presence of gray wolf is confirmed, determine if the habitat is necessary for the wolves' recovery. If the habitat is necessary, coordinate with MFWP and the USFWS to implement the Wolf Recovery Plan. See Appendix D for gray wolf habitat map.	The wolf is no longer listed as a threatened or an endangered species. Effects on wolves and communications with the USFWS and MFWP are discussed in sections on the wolf under Sensitive Species.

Forestwide Threatened and Endangered (T&E) Plant Species Standards	If standard applies, how is standard being met, and where in the project file is the documentation?
1. A biological evaluation will be written for all projects that have potential to impact any T&E species or its habitat. All evaluations will address each project's potential to adversely modify a listed species habitat or behavior. If an adverse impact is determined, mitigation measures will be developed to avoid any adverse modification of a listed species habitat or behavior. If all possible mitigation measures do not result in a no effect determination, then informal and/or formal consultation with the U.S. Fish and Wildlife Service will be initiated.	There are no known T&E plant species on the Forest.
7. No known threatened or endangered plants are on the Helena National Forest.	There are no known T&E plant species on the HNF.
8. Species of Special Concern There are habitats on the Forest where the following species of special concern may be found (Plant Species of Special Concern, USDA-FS, 1980): Lemhi penstemon (Penstemon lemhiensis) Howell's gumweed (Grindelia howellii) Missoula phlox (Phlox missoulensis) Cliff toothwort (Cardamine rupicola) Missoula phlox and cliff toothwort have been located on the Helena Forest. Other Plants that are termed rare have also been located on the Helena Forest. They are Klaus' bladderpod (Lesquerella plausii) and long-styled thistle (Cirsium longistylum). Two additional rare plants, Moschatel (Adoxa moschalellina) and Lesser rushy milkvetch (Astragalus connvallarius) are believed to occur on the Helena Forest but currently have no occurrence records. If any of these species are verified on the Helena Forest, appropriate measures, pursuant to Section 7 of the Endangered Species Act, will be	A Biological Evaluation for sensitive plant species and species of special concern is included in the project record.  Five sensitive plant species are known to occur in the planning area: English sundew, slenderleaf sundew, Missoula phlox, swaying bulrush, and whitebark pine. Additionally the following six species may have habitat in the planning area: scalloped moonwort, peculiar moonwort, lesser yellow lady's slipper, sparrow egg lady's slipper, Howell's gumweed and Hall's rush.  Out of the five sensitive plant species that are known to occur in the planning area, three of them do not occur near roads or trails. Two species, Missoula phlox and whitebark pine, occur within 300 feet of roads and trails and were analyzed in detail in chapter 3.  Alternative 2 would not appreciably change the proximity of Missoula phlox and whitebark pine populations to motorized routes. Alternatives 3 and 4 would both reduce the acres of Missoula phlox and whitebark pine populations that would be in proximity to motorized routes, reducing the potential

#### If standard applies, how is standard being met, Forestwide Threatened and Endangered (T&E) and where in the project file is the **Plant Species Standards** documentation? for adverse impacts. Project design features would taken. minimize the potential for adverse impacts during any ground-disturbing activities under any action alternative. The determination for all sensitive plant species with potential to occur in planning area for any alternative is: May impact individuals but would not contribute toward a trend for federal listing or a loss of viability (MIIH) Subsequent to the completion of the Forest Plan. the Regional Forester designated sensitive plant species for the Region, and identified the known and suspected species for each Forest. Regional office direction in 2011 updated the Forest's sensitive species list. That list still includes two of the species listed in the Forest Plan, Howell's gumweed, and Missoula phlox (now called Phlox kelseyi var. missoulensis instead of P. missoulensis). The other species that are listed in the Forest Plan are not included in the updated sensitive plants list for the Forest or the Northern Region and are not included in specific species searches. On August 26, 2011 the Regional Forester added whitebark pine to the list, stating the sensitive species designation would go into effect 120 days from that date (Weldon 2011a). The Regional Sensitive Species list can be found in the Botany Specialist Report for the project.

## Forestwide Management Indicator Species (MIS) Standards (Wildlife)

## If the standard applies, how is it being met, and where in the project file is the documentation?

1. Populations of wildlife "indicator species" will be monitored to measure the effect of management activities on representative wildlife habitats with the objective of ensuring that viable populations of existing native and desirable non-native plant and animal species are maintained. See Chap. IV, part D Monitoring and Evaluation for specific monitoring requirements. Indicator species have been identified for those species groups whose habitat is most likely to be changed by Forest management activities. The mature tree dependent group indicator species is the marten: the old growth dependent group is represented by the pileated woodpecker and the goshawk; the snag dependent species group is represented by the hairy woodpecker; the threatened and endangered species include grizzly bear, gray wolf, bald eagle and peregrine falcon; commonly hunted indicator species are elk, mule deer and bighorn sheep.

Habitat has been modeled for many of the MIS for which there are potential effects; the documentation is in the project file. Habitat components in the road corridors—primarily snags and logs—would likely be removed by firewood cutters. This removal is insufficient to influence local population structure or regionwide viability.

Forestwide Snag Standards	If the standard applies, how is it being met, and where in the project file is the documentation?
To keep an adequate snag resource (standing dead trees) through the planning horizon, snags should be managed at 70 percent of optimum (average of 2 snags per acre) within each third-order drainage.	The effects of travel management on dead trees are discussed in detail in sections on <i>Snags</i> and MIS and TES species dependent on snags and logs. All effects will be indirect, stemming from the access that open roads give to firewood cutters and magnified currently by the ongoing bark beetle epidemic.
Management areas other than T-1 should be the primary source for snag management. However, if adequate snags cannot be found outside of T-1, then the following numbers and sizes of snags should be retained in cutting units, if available. In units with snags, keep a minimum of 20 snags and 10 replacement trees per 10 acres, if available. If 20 snags are not available, then any combination totaling 30 should be left, by the following d.b.h. classes:  13 snags and 6 replacement trees from 7-11 inches  5 snags and 3 replacement trees from 12-19 inches  2 snags and 1 replacement trees 20+ inches In units—except those of pure lodgepole—without snags keep a minimum of 30 wind firm trees per 10 acres, if available, by the following d.b.h. classes:  21 trees from 7-11 inches  7 trees from 12-19 inches  1 wildlife funds are available, a third of the replacement trees should be girdled or otherwise killed to provide snags, by the following d.b.h. classes:  7 trees from 7-11 inches d.b.h/  2 trees form 12-19 inches d.b.h.  1 tree form 20+ inches d.b.h.	See sections on Snags for a discussion of how travel management is likely to indirectly affect snag distribution. These guidelines are essentially inapplicable to this travel planning effort.

Forestwide Fisheries Standards	If standard applies, how is standard being met, and where in the project file is the documentation?
Maintain quality water and habitat for fish by coordinating Forest activities and by direct habitat improvement (see Forest Wide Standards for riparian).	Standard applies. Fish habitat conditions would be maintained or improved by closing high risk roads and removing stream crossings. Unclassified routes added to the system would show improvements as they would receive annual maintenance.
2. Instream activities should allow for maximum protection of spring and fall spawning habitats.	Standard applies associated with cumulative effects related with road improvements as part of road maintenance program. Any work in streams as a function of road upgrades would require coordination with the state to ensure spawning habitats are not adversely affected. Roads and existing crossings identified under the roads analysis are designed to improve and stabilize road drainage to minimize risk of sediment delivery into the stream system.

Forestwide Fisheries Standards	If standard applies, how is standard being met, and where in the project file is the documentation?
3. Structures installed within streams supporting fisheries will be designed to allow upstream fish movement, especially to spawning areas.	Standard applies as related to installation of new route/stream crossings associated with road improvements and route construction. Any new instream crossing would be of a size to pass all age classes of fish and 100-year flood flow events. All work within streams is closely coordinated with fisheries and MFWP to ensure spawning habitats are accessible and are not adversely affected by sediment.

Forestwide Noxious Weeds Standards	If standard applies, how is standard being met, and where in the project file is the documentation?
1. Implement an integrated weed control program in cooperation with the state of Montana and County Weed Boards to confine present infestations and prevent establishing new areas of noxious weeds. Noxious weeds are listed in the Montana Weed Law and designated by County Weed Boards.	Development of an integrated weed program is not within the scope of this planning effort.  The Helena National Forest has an integrated weed program that includes weed treatment on regular basis. The Montana State Law and County Weed Board lists are used to prioritize weed species. A list of weeds found in the planning area, along with their state and county status, is included in the Noxious Weed Specialist report for the project. The weeds FEIS and Record of Decision are in the references for the Noxious Weed Specialist report in the project record.
2. Integrated Pest Management, which uses chemical, biological, and mechanical methods, will be the principal control method. Spot herbicide treatment of identified weeds will be emphasized. Biological control methods will be considered as they become available.	The Integrated Pest Management program is discussed in the Noxious Weed Specialist report.  The only weed treatment proposed by this project would relate to construction or re-construction of travelways. This is an aspect of the project that would be addressed during the implementation phase. Best management practices and project design features have been identified to ensure weed control would occur when necessary during ground-disturbing activities.
3. Funding for weed control on disturbed sites will be provided by the resource that causes the disturbance.	The only weed treatment proposed by this project would relate to construction or re-construction of travelways. This is an aspect of the project that would be addressed during the implementation phase. The Noxious Weed Specialist and the Economics reports for the project discuss costs of weed treatment.

Forestwide Revegetation Standards	If standard applies, how is standard being met, and where in the project file is the documentation?
Seeding will be done in a timely manner on disturbed areas, to prevent erosion and to achieve best revegetation results.	Project design features and best management practices would be implemented (see chapter 2) for all proposed actions under alternatives 2, 3 and 4 including the use of native seed where appropriate

Forestwide Revegetation Standards	If standard applies, how is standard being met, and where in the project file is the documentation?
2. Seeding mixtures of native plants (naturally occurring) should be used, if practical, in all revegetation projects greater than two acres. On smaller disturbances, the responsible official may authorize the use of exotic species.	Project design features and best management practices would be implemented (see chapter 2) for all proposed actions under alternatives 2, 3 and 4 including the use of native seed where appropriate and ensuring that native seeding mixtures are utilized whenever practical.
3. Seeding guidelines, based on elevation, soil type, parent material, habitat type, and reasonable cost, are listed in Appendix F.	Project design features and best management practices would be implemented (see chapter 2) for all proposed actions under alternatives 2, 3 and 4 including the use of native seed where appropriate. Estimated costs of weed prevention were included in this analysis. Other costs would be developed and considered during the implementation phase of this project.

#### If Standard applies, how is standard being met, **Forestwide Timber Standards** and where in the project file is the documentation? Silvicultural examinations and prescriptions will be Standard does not apply to this current planning required before any timber manipulation or silvicultural treatment takes place. Exceptions include cutting of trees that block vision along roads, cutting hazard trees, clearing right-of-way, clearing for mineral development, minor and incidental amounts of free use, and cutting personal firewood. Final determination of what silvicultural system will be used for a particular project will be made by a certified silviculturist after an on-the-ground site analysis. This site specific analysis will determine the appropriate even or un-even age silvicultural system that best meets the goals and objectives of the management area. Standards for applying all silvicultural systems, as well as supporting research references are in the Northern Region guide (June 10, 1983). In addition, broad guidelines are found in Appendix H and M. Even aged management methods will be used only where it is determined to be appropriate to meet objectives. Clearcutting will be used only where it is the optimum method. 2. Tree improvement will be conducted in Standard does not apply to this current planning accordance with the current Regional and Forest effort. level tree improvement plans. 3. Transportation plans and logging systems must be Standard is met. Timber staff has been consulted on designed jointly to provide for long-term stand the location and availability of the long-term transportation system. management, with full consideration given to topography and slope, the overall economic efficiency of roading and yarding costs, and the needs of other resources. 4. Timber stand openings created by even-aged Standard does not apply to this current planning silvicultural systems will normally be 40 acres or less. effort. Creation of larger openings will require a 60-day public review and Regional Forester approval. Exceptions are listed in the Northern Regional Guide.

Forestwide Timber Standards	If Standard applies, how is standard being met, and where in the project file is the documentation?
5. A feasibility analysis of each sale over one million board feet will be made to assure that it has been designed with the most cost-effective measure possible in keeping with environmental concerns. This analysis will examine strategic items in the sale design process to assure consideration of economic impacts of these items on the sale value. A cash flow analysis will be done to determine the viability of the sale with current market conditions. If anticipated costs are higher than predicted high bids, consider the following:  a. Defer the sale until economic conditions would	Standard does not apply to this current planning effort.
indicate receiving higher bids.  b. Proceed to sell the timber and provide proper documentation that benefits, other than immediate monetary return from the timber, are of importance.	

Forestwide General Watershed Guidance Standards	If standard applies, how is standard being met, and where in the project file is the documentation?
Coordination with the State of Montana, as required by the Clean Water Act (33 U.S.C. 1323), concerning stream channels and water quality protection is detailed in the Cooperative Agreement to Implement the 208 Program on National Forests in the State of Montana. The agreement is in FSM 2563.11, R.O. Supplement.	Coordination would occur as needed. All appropriate permits will be obtained prior to implementation for controlling non-point pollution sources and meeting State water quality standards.
3. A project which causes excessive water pollution, undesirable water yield, soil erosion, or site deterioration will be corrected where feasible, or the project will be re-evaluated or terminated.	These effects are not anticipated for this project. Implementation of the project including the project design features will avoid this type of activity. All action alternatives would result in reduced sediment to streams and improved water quality.
5. Practices in the Soil and Water Conservation Practices Handbook (FSH 2509.22) developed cooperatively by the State Water Quality Agency and the Forest Service will be incorporated, where appropriate, into all land use and project plans as a principal mechanism for controlling non-point pollution sources and meeting soil, State water quality standards and other resource goals.	The Soil and Water Conservation Practices Handbook (FSH 2509.22) has been superseded by The National Best Management Practices for Water Quality Management on National Forest System Lands (FS-990a). Best Management Practices (BMPs) have been prescribed for and incorporated into the decision as described in Chapter 2 of the FEIS and the hydrology report for the FEIS.
7. An environmental analysis, following the process in FSMs 2526 and 2527, will be made for all management actions planned for flood plains, wetlands, riparian areas, or bodies of water prior to implementation. This analysis will determine the short- and long-term adverse impacts and mitigating measures associated with the planned management actions.	Any new ground-disturbing activities involved with removing culverts from streams may have short-terms adverse impacts to floodplains, wetlands, riparian areas, or bodies of water beyond current levels, but this disturbance would be far outweighed by the long-term beneficial impacts of returning the stream to its natural course.

Forestwide Soil Guidance Standards	If standard applies, how is standard being met, and where in the project file is the documentation?
In accordance with NFMA, RPA, and Multiple Use-Sustained Yield Act, all management activities will be planned to sustain site productivity. During project analysis, ground-disturbing activities will be reviewed and needed mitigating actions prescribed.	Generally, roads and trails are a dedicated use for the lands that comprise the road prism. Impacts to soil productivity resulting directly from the presence of roads and trails is not evaluated for compliance with Region 1 soil quality standards (compliance with NFMA) for this report, because the affected land is managed for transportation uses not for vegetation production. The National Forest Roads and Trails Act of 1964 authorize the Forest Service to establish and maintain a network of roads and trails on National Forest System Lands. The Forest Service has the authority to withdraw lands from vegetation production and related soil productivity on National Forest for dedication to road and trail corridors for transportation and access uses. Helena National Forest Plan guidance to sustain soil productivity when planning management activities would not be applicable to this decision to open, close or create new travel routes.
Areas of decomposed granite soils will be identified and erosion control measures planned prior to any ground disturbing activities.	All soils will be protected during any ground-disturbing activity by employing BMPs during activities such as road construction and reconstruction and road maintenance. Areas with Granitic soils have not received emphasis for road closure and decommissioning and erosion control efforts in this project. However, both alternative 3 and 4 reduce open road mileage on granite-derived soils. Completely eliminating routes on all Granitic landtypes would be most beneficial, however, it would be simply impractical to accomplish this and at the same time effectively manage the Forest.
To reduce sedimentation associated with management activities, the highly sensitive granitic soils, which cover about 20 percent of the Forest, will have first priority for soil erosion control.	Overall, designated Forest routes are designed to minimize sediment production and erosion potential. Granitic soils have not been prioritized for treatment under this project for soil erosion control. However, BMPs will be employed for all aspects of road management to protect soils.

Forestwide Minerals Standards	If standard applies, how is standard being met, and where in the project file is the documentation?
The 1964 Wilderness Act stipulates that effective December 31, 1983, no further mineral entry would be permitted in existing wilderness areas. This includes leasing for oil and gas, applying for patent on existing claims, and staking new claims. However, citizens' right to enter public land for prospecting or working valid existing claims is unchanged.	Standard applies. There are no unpatented mining claims in the Scapegoat Wilderness Area, thus there is no possibility of mineral entry for hard rock mineral development. Wilderness areas are congressionally unavailable for mineral leasing.
2. Areas withdrawn from mineral entry should be reevaluated every five years in accordance with Federal Land Policy and Management Act (FLPMA) to determine if the withdrawal is still necessary. (See Appendix Q.)	Standard does not apply. The analysis area does not have any areas withdrawn from mineral entry.

Forestwide Minerals Standards	If standard applies, how is standard being met, and where in the project file is the documentation?
Access for development of locatable and leasable minerals will be allowed on a case-by-case basis. Access should be directed toward minimizing resource impacts and be coordinated with other land uses.	Standard applies. Mineral project proposals submitted as a Plan of Operation are evaluated and resources impacts are mitigated to the extent possible through the NEPA process, and through negotiation with the mineral proponent. 2810 Mineral Project files and documentation of their administration are located at the Lincoln Ranger District and at the Helena National Forest Headquarters.

Forestwide Locatable Minerals Standards	If standard applies, how is standard being met, and where in the project file is the documentation?
Consistent with the Mining and Mineral Policy Act of 1970, continue to encourage the responsible development of mineral resources on National Forest lands. Concurrently, require mitigation measures to protect surface resources.	Standard applies. See #3 Minerals General Standard above.
Provide guidance to miners and prospectors for planning reclamation and to minimize environmental damage.	Standard applies. See #3 Minerals General Standard above.
Increase I&I efforts through publicizing the appropriate laws, regulations, and policies, to reduce cases of non-compliance from lack of knowledge of mining rules.	Standard applies. See #3 Minerals General Standard above.
Increase compliance inspections commensurate with mineral activities.	Standard applies. See #3 Minerals General Standard above.
5. When every reasonable attempt has failed to correct mining operations that are unnecessarily or unreasonably causing or threatening to cause irreparable injury, loss, or damage to surface resources, the Forest Service will seek judicial relief.	Standard applies. See #3 Minerals General Standard above.
Maintain a liaison with local mining industry and mining associations. Cooperate with Federal and State agencies which administer mineral laws.	Standard applies. See #3 Minerals General Standard above.
7. Following mineral development the Forest Service will require reclamation of surface disturbance to prevent or control on- and off-site damage. Reclamation includes, but is not limited to: a. Control of erosion and landslides.	Standard applies. See #3 Minerals General Standard above.
b. Control of water runoff.	
<ul><li>c. Isolation, removal, or control of toxic materials.</li><li>d. Reshaping and revegetation of disturbed areas.</li></ul>	
e. Rehabilitation of fisheries and wildlife habitat.	

Forestwide Saleable Minerals Standards	If standard applies, how is standard being met, and where in the project file is the documentation?
Common variety mineral permits will be considered on a case-by-case basis and will be issued only if consistent with the management area goals.	Standard applies. There are currently no active sale permits in the Travel Plan area. Applications for mineral material sales permits are discretionary and are evaluated on a case-by-case basis.

#### If standard applies, how is standard being met, and where in the project file is the documentation? **Forestwide Seismic Exploration Standards** 1. An environmental analysis will be completed for Completed National Historic Preservation Act each application. A prospecting permit will be Section 106 process for the Blackfoot Non-Winter issued on a case by case basis and will contain Travel Plan project- inventory, evaluation of stipulations designed to coordinate surface significance, evaluation of project effect. State Historic Preservation Office and Tribal consultation. resource values. The following apply where appropriate: Particular consideration given to cultural resources listed on the National Register of Historic Places. a. Water quality and quantity: Stipulations may be issued to limit activities within 100 feet of all streams, lakes, springs, and ponds. b. Threatened and endangered species habitat: Stipulations will be issued to protect threatened and endangered species by limiting activities during critical periods, and protecting important habitat elements. c. Nongame habitat: Stipulations may be used to limit surface use as a coordination and/or mitigation measure for species listed in State of Montana, Species of Special Interest and Concern. (The State species list is part of the Wildlife Planning Records.) d. Big game habitat: To protect key areas for big game (i.e., winter range, summer concentration habitats, calving areas, lambing areas, big game travel routes, etc.), stipulations may be used during critical periods. e. Archeological and Historic Resources: Proposed seismic survey work which may impact identified cultural and paleontological resources will be required to skip portions of the work or to relocate survey lines around known resource areas. Other resource threatening work will be required to fully comply with the Antiquities Act of 1906 and other related Acts pertaining to cultural resources. f. Special Uses, Leases, and Permits: To protect authorized special uses, leases, and permits. include stipulations to restrict occupancy by timing and location on a case-by-case basis. g. Fire: Seismic work during periods of high fire danger may not be allowed. To prevent wildfire, stipulations may be included to restrict timing and location of seismic operations. Stipulations may also be used to specify procedures and firefighting equipment required by seismic crews. h. Land Stability and Erosion: Surface occupancy stipulations may be used to prohibit occupancy on lands subject to mass wasting and on slopes

Forestwide Seismic Exploration Standards	If standard applies, how is standard being met, and where in the project file is the documentation?
60 percent and greater.	
Recreation: To accommodate concentrated recreational areas (i.e., picnic grounds and campgrounds), stipulations may be used to restrict seismic activities by location and timing.	

Forestwide Road Standards	If standard applies, how is standard being met, and where in the project file is the documentation?
Road construction and reconstruction will be the minimum density, cost, and standard necessary for the intended need, user safety, and resource protection.	Where short segments of road or motorized trail are identified, they will be designed to current standards as set forth in Forest Service handbook and manual direction FSM 7700, FSH 7709.55 and FSH 7709.56 and will be in compliance with the Streamside Management Zone Law 77-5-301 (2001), Water Quality Best Management Practices for Montana Forests (2001) (BMPs) and the USDA National Best Management Practices for Water Quality Management on National Forest Land (April 2012) SMZ and BMP documents are included in the project record.
Forest development roads will not be constructed without an approved Area Transportation Analysis. Other road construction will be evaluated on a case-by-case basis.	This Travel Planning Effort in accordance with Forest Service handbook and manual direction FSM 7700 and FSH 7709.55 is considered to be an Area Transportation Analysis and the new segments of roads are being approved as part of this process. They will be constructed in compliance with the SMZ law and BMPs both of which can be found in the project record.
<ol> <li>Forest Specialists representing soils, watershed, and fisheries shall identify potential soil erosion, water quality and fisheries problems and provide input to the development of road design standards. Mitigating measures which will be considered in developing these standards include but not limited to:         <ol> <li>Reestablishing vegetation on exposed soils.</li> <li>Protecting the road surface through surface stabilization techniques such as dust oil or gravel, especially on decomposed granitic soils.</li> <li>Preventing downslope movement of sediment with the use of slash windrows below the fill slopes near stream crossings, baled straw in ditches and catch basins at culvert inlets.</li> <li>Reducing soil disturbance in or near streams by diverting clear water around culvert installation sites, especially in important fisheries streams.</li> <li>Controlling the concentration of water flow by insloping, outsloping and using minimum grades at stream crossings.</li> </ol> </li> <li>Short-term local roads will be used for one time</li> </ol>	Consultation with specialists as well as with state and local agencies when necessary are a standard practice when new road construction is considered on National Forest System lands. The following items would be considered and addressed in accordance with the SMZ and BMPs:  a. Reestablishing vegetation post construction b. Surface stabilization techniques c. Sediment concerns d. Soil disturbance near streams e. Water flow concerns and necessary slopes to accommodate flow

Forestwide Road Standards	If standard applies, how is standard being met, and where in the project file is the documentation?
road access needs.	of the alternatives.
Coordinate transportation planning and road management with State and local agencies and owners of intermingled land.	The Forest is in the process of obtaining the necessary easements or already has them in place. Consultations with state and local agencies take place as part of this process when necessary.

#### If standard applies, how is standard being met, and where in the project file is the Forestwide Road Management Standards documentation? 1. The Helena National Forest will generally be open In all alternatives, access to the Helena National to vehicles except for roads, trails, or areas that Forest will generally be open to vehicles except for may be restricted. (See Forest Visitor Map for roads and trails that may be restricted as defined in specific information.) The Forest Road the road and trail management objective. Management Program will be used to review, Regardless of the alternative selected, the Forest evaluate, and implement the goals and standards Road Management Program will be used to of the management areas in the Forest Plan with implement the goals and standards of the regard to road, trail, and areawide motorized management areas in the forest plan with regard to vehicle use. This standard was amended based road, trail and area wide motorized vehicle use. on the 2001 Tri-State Off-Highway Vehicle Decision (see Summary of Forest Plan Amendment 20 at the beginning of appendix A) 2. Road management decisions will be based on a. Safety - This analysis is in accordance with user needs, public safety, resource protection, current manual direction FSM 7700 Chapter and economics. Most existing roads will be left 7710, which requires when designating NFS open. But most new roads will be closed, at least roads and trails consideration for public safety. during critical periods for big game. resource protection, economics, and conflicting use. The intended purpose, design criteria and The criteria to be used for road, trail, or area operation and maintenance criteria for each NFS restrictions are as follows: road and trail will be documented and included as a. Safety - Restrictions may be necessary to part of the transportation atlas as road and trail provide for safety of Forest users. management objectives. b. Resource Protection - Unacceptable damage to b. Resource Protection - All alternatives allow for soils, watershed, fish, wildlife, or corrective actions to be taken whenever and historical/archaeological sites will be mitigated where ever damage is occurring. by road restrictions or other road management c. Economics - There are no significant changes to actions as necessary. Restrictions for wildlife economics in any of the alternatives. reasons will be coordinated with the MFWP. Maintenance will continue on all roads (at c. Economics - Restrictions will be considered if different levels depending on need) regardless of maintenance costs exceed benefits. this analysis. d. Conflicting Use - Conflicts between user groups d. Conflicting Use - Conflicts requiring engineering (especially motorized vs. non-motorized) may input will be addressed on a case-by-case basis. require restrictions. e. Facility Protection - As necessary restrictions e. Facility Protection - Restrictions may be would be left in place or put in place to prevent necessary to prevent damage to administrative damage to administrative sites, special use sites, special use facilities, or other facilities or other improvements. improvements. f. Public Support - Public concerns would be f. Public Support - Public concern may necessitate addressed on a case-by-case basis. restricting or opening some roads, trails, or g. Management Objectives - Land management objectives are met through using road g. Management Objectives - Road management management under all three alternatives. will be used to achieve land management objectives. 3. The travel restrictions will be reviewed annually Travel Restrictions would continue to be evaluated and revised as necessary to meet the goals and annually and adjusted as necessary

Forestwide Road Management Standards	If standard applies, how is standard being met, and where in the project file is the documentation?
objectives of the Forest Plan.	
4. Enforcement of the Road Management Program will be a high priority. Weekend patrolling, signing, gating, obliterating unnecessary roads and public education will be used to improve enforcement. Enforcement will be coordinated with the MFWP and other State and local agencies.	Law enforcement would take necessary action to enforcement of the road management program.

Forestwide Road Maintenance Standards	If standard applies, how is standard being met, and where in the project file is the documentation?
1. Roads will be maintained in accordance with direction provided in FSH 7709.15 (Transportation System Maintenance Handbook) and will be at a level commensurate with the need for the following operational objectives: resource protection, road investment protection, user safety, user comfort, and travel efficiency.	Maintenance dollars are dispersed annually along with identified targets. Funds are generally directed to higher use roads first and to specific areas where there is a need identified to prevent resource damage. Additional funding sources in the form of project work are also used to accomplish additional maintenance as opportunities. Partnerships are also fundamental in accomplishing road maintenance.
<ol><li>Assigned maintenance levels will be reviewed annually and revised if management objectives change.</li></ol>	Maintenance levels are constantly evaluated for appropriateness
<ol> <li>A Forest Road Maintenance Schedule will be prepared annually and be responsive to the long- term needs of the Forest Transportation System.</li> </ol>	The Forest prepares a maintenance schedule annually as well as prepares projects in advance in an effort to obtain funding as it come available.
4. Forest specialists representing soils and watershed shall provide input to the road maintenance planning process to verify maintenance standards, identify rehabilitation needs, and designate roads that should be permanently closed for resource protection. Specialists will annually submit capital investment project proposals for major road reconstruction needs.	A cooperative effort is ongoing to maintain roads to standards that ensure resource protection.

Forestwide Trail Standards	If Standard applies, how is standard being met, and where in the project file is the documentation?
1. Trail management, such as trail standards, maintenance schedules, funding, trail use, construction, and reconstruction, will follow the guidance in Trails Management Handbook, FSH 2309.18.	All trails approved in the Blackfoot Travel Plan would be constructed and maintained in compliance with existing FS trail standards.
Generally, trail maintenance work priorities will be established as follows:     Priority 1. Activities to correct unsafe conditions	Trail maintenance needs resulting from the Blackfoot Travel Plan decision would be implemented based on these priorities
relative to management objectives.  b. Priority 2. Activities to minimize unacceptable resource and trail damage.	
c. Priority 3. Activities that restore the trail to	

planned design standards.	
3. Trail construction/reconstruction will be designed and accomplished to be compatible with the recreation settings and management area goals.	All trails approved in the Blackfoot Travel Plan would be constructed and maintained in compliance with existing FS trail standards.
4. Trails may be abandoned or rerouted when a road changes the character of the trail or when the maintenance cost exceeds the benefit.	No trails would be abandoned under the Blackfoot Travel Plan.

INFISH Standards Columbia River Basin*	If Standard applies, how is standard being met, and where in the project file is the documentation?
Roads Management	
RF-I Cooperate with Federal, Tribal, State, and county agencies, and cost-share partners to achieve consistency in road design, operation, and maintenance necessary to attain Riparian Management Objectives.	Other Federal, Tribal, State and county agencies would be consulted including the US Fish and Wildlife Service for formal consultation under Section 7 of the Endangered Species Act for listed species.
RF-2 For each existing or planned road, meet the Riparian Management Objectives and avoid adverse effects to inland native fish by:  a. completing watershed analysis prior to construction of now roads or landings in Riparian Habitat Conservation Areas within priority watersheds.	a. and b. No new construction of routes is proposed in RHCAs of priority watersheds. Roads decommissioning is planned in RHCAs to minimize the road system impacts to fisheries.
b. minimizing road and landing locations in Riparian Habitat Conservation Areas. c. initiating development and implementation of a Road Management Plan or a Transportation Management Plan. At a minimum, address the following items in the plan:	step in initiating a site-specific plan for motorized and non-motorized routes. Other actions that meet sub-elements of item c include:
Road design criteria, elements, and standards that govern construction and reconstruction.  2. Road management objectives for each road.  3. Criteria that govern road operation, maintenance, and management.  4. Requirements for pre-, during-, and post-storm inspections and maintenance.	New construction of routes or other ground disturbing activities are included in this project will be designed to minimized impacts to watersheds. For reconstruction and maintenance, all design elements are covered via maintenance measures covered under the 1999 Programmatic Biological Assessment for Road Maintenance (MT Bull Trout Level 1 Team).
<ul> <li>5. Regulation of traffic during wet periods to minimize erosion and sediment delivery and accomplish other objectives.</li> <li>6. Implementation and effectiveness monitoring plans for road stability, drainage, and erosion</li> </ul>	Road management objectives are addressed in the roads INFRA database with no proposals to change these objectives under this decision.
control.  7. Mitigation plans for road failures. d. avoiding sediment delivery to streams from the road surface.	Criteria that govern road operation/maintenance are covered under FSM Title 7700, R1 Supplement 46, Chapter 7730 (Operation and Maintenance).
Outsloping of the roadway surface is preferred, except in cases where outsloping would increase sediment delivery to streams or where outsloping is information.	Road maintenance requirements, including condition surveys, are covered under FSH 7709.59, Chapter 60.
infeasible or unsafe.  2. Route road drainage away from potentially	35 CFR 212.52 (b)(2) discusses conditions under which restrictions would be imposed on traffic pursuant to 36 CFR part 261 (B).

INFISH Standards Columbia River Basin*	If Standard applies, how is standard being met, and where in the project file is the documentation?
unstable stream channels, fills, and hillslopes. e. avoiding disruption of natural hydrologic flow paths.	This element is addressed in the road portion of the Forestwide monitoring plans.
f. avoiding sidecasting of soils or snow. Sidecasting of road material is prohibited on road segments within or abutting RHCAs in priority watersheds.	Mitigation plans for road failures are not fully addressed under FSH 7709.59. Chapter 60. If a road failure were to occur, part d applies.
	d. all design elements are covered via maintenance measures covered under the 1999 Programmatic Biological Assessment for Road Maintenance (MT Bull Trout Level 1 Team).
	e. new routes proposed in this travel plan would be constructed to minimize impacts to watersheds or located outside RHCAs.
	f. Sidecasting of road material < 4" and of snow for snow removal operations are covered under the 1999 Programmatic Biological Assessment for Road Maintenance (MT Bull Trout Level 1 Team).
RF-3 Determine the influence of each road on the Riparian Management Objectives. Meet Riparian Management Objectives and avoid adverse effects on inland native fish by:	This was completed during the Roads Analysis process (Helena NF 2004).
a. reconstructing road and drainage features that do not meet design criteria or operation and maintenance standards, or that have been shown to be less effective than designed for controlling sediment delivery, or that retard attainment of Riparian Management Objectives, or do not protect priority watersheds from increased sedimentation.	a. Road maintenance would be completed all routes added to the roads system, design elements are covered via maintenance measures covered under the 1999 Programmatic Biological Assessment for Road Maintenance (MT Bull Trout Level 1 Team).  b. This was completed during the Roads Analysis process (Helena NF 2004) and with the Blackfoot
b. prioritizing reconstruction based on the current and potential damage to inland native fish and their priority watersheds, the ecological value of the riparian resources affected, and the feasibility of options such as helicopter logging and road relocation out of Riparian Habitat Conservation Areas.	Non-Winter Travel plan.  c. This element applies and is addressed in this project by prioritizing roads in need of storage or decommissioning or culverts removed to remove impacts to RHCAs and native fish.
c. closing and stabilizing or obliterating, and stabilizing roads not needed for future management activities. Prioritize these actions based on the current and potential damage to inland native fish in priority watersheds, and the ecological value of the riparian resources affected.	
RF-4 Construct new, and improve existing, culverts, bridges, and other stream crossings to accommodate a 100-year flood, including associated bedload and debris, where those improvements would/do pose a substantial risk to riparian conditions. Substantial risk improvements include those that do not meet design and operation maintenance criteria, or that have been shown to be less effective than designed for controlling erosion, or that retard attainment of Riparian Management Objectives, or that do not protect priority watersheds from increased sedimentation. Bass priority for upgrading on risks in priority watersheds and the ecological value of the riparian resources affected.	This standard is not directly applicable to the travel plan project; however, standard operating procedures and best management practices would continue to be used for any new designs

INFISH Standards Columbia River Basin*	If Standard applies, how is standard being met, and where in the project file is the documentation?
Construct and maintain crossings to prevent diversion of stream flow out of the channel and down the road in the event of crossing failure.	
RF-5 Provide and maintain fish passage at all road crossings of existing and potential fish-bearing streams	The project has identified culverts on fish-bearing streams to be removed to improve passage for native fish.
Recreation Management	
RM-1 Design, construct, and operate recreation facilities, including trails and dispersed sites, in a manner that does not retard or prevent attainment of the Riparian Management Objectives and avoids adverse effects on inland native fish. Complete watershed analysis prior to construction of now recreation facilities in Riparian Habitat Conservation Areas within priority watersheds. For existing recreation facilities inside Riparian Habitat Conservation Areas, assure that the facilities or use of the facilities would not prevent attainment of Riparian Management Objectives or adversely affect inland native fish. Relocate or close recreation facilities where Riparian Management Objectives cannot be met or adverse effects on inland native fish cannot be avoided.	Standard applies as dispersed campsites are associated with the current transportation system and they occur within the INFISH buffer. Dispersed campsites in the RHCA will be monitored, if they are found to prevent attainment of RMOs, would be closed and rehabilitated
RM-2 Adjust dispersed and developed recreation practices that retard or prevent attainment of Riparian Management Objectives or adversely affect inland native fish. Where adjustment measures such as education, use limitations, traffic control devices, increased maintenance, relocation of facilities, and/or specific site closures are not effective in meeting Riparian Management Objectives and avoiding adverse effects on inland native fish, eliminate the practice or occupancy.	Discussion for RM-1 above applies to RM-2.
RM-3 Address attainment of Riparian Management Objectives and potential effect on inland native fish in Wild and Scenic Rivers, Wilderness, and other Recreation Management plans.	Not applicable to this project.

# 36 CFR 212.55 Criteria for Designation of Roads, Trails and Areas (from 2005 Travel Management Rule (36 CFR Parts 212, 251, 261, and 295)

#### § 212.55 Criteria for designation of roads, trails, and areas.

(a) General criteria for designation of National Forest System roads, National Forest System trails, and areas on National Forest System lands. In designating National Forest System roads, National Forest System trails, and areas on National Forest System lands for motor vehicle use, the responsible official shall consider effects on National Forest System natural and cultural resources, public safety, provision of recreational opportunities, access needs, conflicts among uses of National Forest System lands, the need for maintenance and

- administration of roads, trails, and areas that would arise if the uses under consideration are designated; and the availability of resources for that maintenance and administration.
- (b) Specific criteria for designation of trails and areas. In addition to the criteria in paragraph (a) of this section, in designating National Forest System trails and areas on National Forest System lands, the responsible official shall consider effects on the following, with the objective of minimizing:
  - (1) Damage to soil, watershed, vegetation, and other forest resources;
  - (2) Harassment of wildlife and significant disruption of wildlife habitats;
  - (3) Conflicts between motor vehicle use and existing or proposed recreational uses of National Forest System lands or neighboring Federal lands; and
  - (4) Conflicts among different classes of motor vehicle uses of National Forest System lands or neighboring Federal lands.

In addition, the responsible official shall consider:

- (5) Compatibility of motor vehicle use with existing conditions in populated areas, taking into account sound, emissions, and other factors.
- (c) Specific criteria for designation of roads. In addition to the criteria in paragraph (a) of this section, in designating National Forest System roads, the responsible official shall consider:
  - (1) Speed, volume, composition, and distribution of traffic on roads; and
  - (2) Compatibility of vehicle class with road geometry and road surfacing.
- (d) Rights of access. In making designations pursuant to this subpart, the responsible official shall recognize:
  - (1) Valid existing rights; and
  - (2) The rights of use of National Forest System roads and National Forest System trails under § 212.6(b).
- (e) Wilderness areas and primitive areas. National Forest System roads, National Forest System trails, and areas on National Forest System lands in wilderness areas or primitive areas shall not be designated for motor vehicle use pursuant to this section, unless, in the case of wilderness areas, motor vehicle use is authorized by the applicable enabling legislation for those areas.

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# **Appendix B – Scoping Commenters**

Table B- 1. Responses to 2010 scoping efforts for the Blackfoot Travel Plan

Date Received	Number	Commenter Name	Organization
10/30/10	1	Jean Public	
11/4/10	2	Jerry Burns (conversation)	
11/4/10	3	Dave Erickson	
11/6/10	4	Elwood Hiatt	
11/8/10	5	Russ Currie	
11/8/10	6	Chuck & Wendi Dietz, Mark Graves	
11/8/10	7	Al Lubeck (conversation)	
11/9/10	8	William Thomas	
11/10/10	9	Bob Sparky	
11/13/10	10	Eric Grove	
11/15/10	11	Wayne Chamberlin	
11/15/10	12	Brett Schumacher	
11/15/10	13	Chelsey Anna	
11/15/10	14	Saundra Elliot	
11/15/10	15	Randy Ward	
11/15/10	16	Ken Jacobson	
11/16/10	17	Heidi Annav	
11/16/10	18	Duane Cassidy	
11/16/10	19	Bert Beattie	
11/16/10	20	Leah Mcilhenny	
11/16/10	21	Cat Harringtone	
11/16/10	22	Jessica Barr	
11/16/10	23	Neil Bennett	
11/16/10	24	Bridger Bukantis	
11/16/10	25	Jim Mullins	
11/16/10	26	Jeff Dorrington	
11/16/10	27	Bridget Barfield	
11/16/10	28	John Picard	
11/16/10	29	Lizi Wirak	
11/16/10	30	Jacob Degenstein	
11/16/10	31	Patrick Rhea	
11/17/10	32	Vincent Vaccaro	
11/17/10	33	Tim Mulcare	
11/17/10	34	Gene Sentz	
11/17/10	35	Chris Jackson	
11/17/10	36	Erika Foster	
11/17/10	37	Dylan DesRoiser	

Date Received	Number	Commenter Name	Organization
11/17/10	38	Josh Klaus	
11/18/10	39	Alan Elliot	
11/18/10	40	John DiBari	
11/18/10	41	Stephan Handler	
11/18/10	42	Chris Carlson	
11/18/10	43	Jonathon Campbell	
11/18/10	44	Jake Veto	
11/18/10	45	John Austin	
11/18/10	46	Benjamin McIsaac	
11/18/10	47	Christopher Ahlf	
11/18/10	48	Lisa Willis	
11/18/10	49	Kirsten Kobor	
11/18/10	50	Katheryn Mundell	
11/18/10	51	Jesse Varnado	
11/19/10	52	Fanny Diaz	
11/19/10	53	Julie DalSaglio	US Environmental Protection Agency
11/19/10	54	Al Smith	
11/19/10	55	Bob Levitan	
11/20/10	56	Will Martin	
11/21/10	57	Kristina Young	
11/21/10	58	Svein Newman	
11/21/10	59	Eric Johnson	
11/21/10	60	Julia Forgerite	
11/21/10	61	John Monroe	
11/22/10	62	Scott Stoner	Helena Trail Riders
11/22/10	63	Kathleen Mckeown	
11/22/10	64	Micheal Brown	
11/22/10	65	Robert Petnitz	
11/23/10	66	Maryalice Chester	
11/24/10	67	James Volberding	Atna Resources
11/24/10	68	Sara Tubman	
11/24/10	69	Rebecca Blend	
11/24/10	70	John Wolverton	
11/24/10	71	Tarn Ream	
11/24/10	72	Janet Tatz	
11/26/10	73	CTVA Action	
11/26/10	74	Mike Arave	
11/26/10	75	Dave Koch	
11/26/10	76	Ken & Marge Foran	
11/27/10	77	Claudia Clifford	
11/28/10	78	Laura Ann	

Date Received	Number	Commenter Name	Organization
11/29/10	79	Greg Munther	
11/29/10	80	David Rockwell	
11/29/10	81	Logan McInnis	
11/29/10	82	Kelly Stolp	
11/29/10	83	Dylan Rogness	
11/29/10	84	Linda & Denis	
11/29/10	85	Teresa Lacey	
11/29/10	86	Les Bramblett	
11/29/10	87	Luke Osborne	
11/29/10	88	Barbara Meek	
11/29/10	89	Don Matsko	
11/29/10	90	Duane Richie	
11/29/10	91	Action Committee	Capital Trail Vehicle Association
11/29/10	92	Randy and Julie Shotnokoff	
11/29/10	93	Tiffany Shotnokoff	
11/30/10	94	Todd Harwell	
11/30/10	95	Jeff Juel	
11/30/10	96	Donna Roos Mix	
11/30/10	97	Jeanne Muir	
11/30/10	98	Ralph Peck	
11/30/10	99	Robert Adams	
12/1/10	100	David Covert	
12/1/10	101	Kathy Covert	
12/1/10	102	Corrine & Jerry Gates	
12/1/10	103	Mike & Jeanne Knecht	
12/1/10	104	Mitchell Lovely	
12/1/10	105	Patricia Sharp	
12/1/10	106	Bruce Turner	
12/1/10	107	Jerry Burns	
12/1/10	108	Lindsay Atwell	
12/1/10	109	Theron Burch	
12/1/10	110	James Combs	
12/1/10	111	Darik Corzine	
12/1/10	112	Cory Ehres	
12/1/10	113	Mary Fay	
12/1/10	114	Don Gordon	
12/1/10	115	Les Howard	
12/1/10	116	John Jones	
12/1/10	117	Ron Lee	
12/1/10	118	Clark Meadow	
12/1/10	119	Cody McDonald	

Date Received	Number	Commenter Name	Organization
12/1/10	120	Nikki McDonald	
12/1/10	121	Brennan Meek	
12/1/10	122	Ralph Peck	
12/1/10	123	Sandra Rachlis	
12/1/10	124	Julie Reardon	
12/1/10	125	Ce Sanddal	
12/1/10	126	James Super	
12/1/10	127	Dick Thweatt	
12/1/10	128	Leonard Nelson	
12/1/10	129	Tammy Nadar	
12/1/10	130	Trudy Nelson	
12/1/10	131	Vogt Greene	
12/2/10	132	Tim and Jan Horan	
12/4/10	133	Kathy Lloyd and Drake Barton	
12/6/10	134	Terri John and Mike Hankins	
12/7/10	135	Brian Lee	
12/7/10	136	Richard Canfield	
12/7/10	137	Jennifer Loomis	
12/7/10	138	Wayne Hecker	
12/7/10	139	Grant Alban	
12/7/10	140	Ursula Carpenter	
12/7/10	141	Will Selser	
12/7/10	142	Juliette Crump	
12/7/10	143	Ellen Knight	
12/7/10	144	Jim Parker	
12/7/10	145	Marie and Glenn Heyman	
12/7/10	146	Matt Dunkle	
12/7/10	147	Kip Beckwith	
12/7/10	148	Lynne Merrick	
12/7/10	149	Bill Hallinan	
12/8/10	150	Jay Palmatier	
12/8/10	151	William Clarke	
12/8/10	152	Ann Curran	
12/8/10	153	Becky Richards	
12/8/10	154	Aaron Foster	
12/8/10	155	Thomas Morarre	
11/29/10	156	Bob O'Connell	
12/8/10	157	Paul Pacini	
12/9/10	158	Jim Heckel	
12/9/10	159	Bryan Nickerson	
12/9/10	160	Shannon Maddox	

Date Received	Number	Commenter Name	Organization
12/13/10	161	Jimmy Weg	
12/9/10	162	Ann Hudson	
12/9/10	163	Kim Lugthart	
12/09/10	164	Nicole Smart	
12/10/10	165	Kate	
10/10/10	166	Art Callan	
12/10/10	167	Printer Bowler	
12/11/10	168	Jennings Anderson	
12/13/10	169	Mark Lundquist	
10/13/10	170	George Widener	
12/13/10	171	Duane Harp	
12/15/10	172	David Nardinger	
12/15/10	173	Dennis Milburn (conversation)	
12/16/10	174	Marianne Spitzform	
12/18/10	175	Douglas Miller	
12/20/10	176	Sally Lydon	
12/21/10	177	John Heffernan	
10/22/10	178	Hank and Karen Hudson	
12/22/10	179	Lynn Hailey	
12/22/10	180	Michael Ford	
12/22/10	181	Gerry Jennings	
12/22/10	182	Billie and Frank Houle	
12/23/10	183	David Boggs	
12/27/10	184	John Roberts	Roberts Racing
12/28/10	185	June Rothe-Barneson	
12/28/10	186	Joan Bailey	
12/28/10	187	Doug Abelin, Don Gordon, Ken Salo, George Wirt	Capital Trail Vehicle Association (CTVA)
12/29/10	188	Tyson Radley O'Connell	
12/29/10	189	Debbie Peterson	
12/29/10	190	Mike Berry	
12/29/10	191	Marc Parriman	
12/29/10	192	Ryan O'Connell	
12/29/10	193	Curt Cochran	
12/29/10	194	Dan Harper	
12/30/10	195	Riki Nichols	
12/30/10	196	Jim Wolf	Continental Divide Trail Society (CDTS)
1/02/10	197	Heather McRee	
1/02/10	198	Wendy Wheeler	
1/02/10	199	Jerry Grebenc	
1/03/11	200	Nate Eitzmann	
1/03/11	201	Sanna Port	

Date Received	Number	Commenter Name	Organization
1/03/11	202	Gabriel Furshong	
1/03/11	203	Heather Humphrey	
1/3/09	204	Jim Emerson	
1/3/10	205	Dan and Colleen Nichols	
1/4/11	206	Shane O'Connell	
1/4/11	207	Arthur Butler	
1/4/11	208	Dennis Milburn	
1/4/11	209	Allen Edwards	
1/4/11	210	Jake Troyer	
1/4/11	211	Todd Davis	
1/4/11	212	Eliza Frazer	
1/4/11	213	Bill Bucher	
1/5/11	214	Warren Hampton	
1/4/11	215	Steve Spraycar	
1/5/11	216	Roddy Bullis	
1/5/11	217	Timothy Burton	
1/5/11	218	Sue Bennett	
1/5/11	219	George Kamps	
1/5/11	220	Thomas Kilmer	
1/5/11	221	Kerry White	Citizens for Balanced Youth
1/5/11	222	Susan Epstein	
1/5/11	223	Todd Russell	
1/5/11	224	Mary Camparelli	
1/5/11	225	Carol Crowley	
1/6/11	226	Maryalice Chester	
1/6/11	227	Pete Carparelli	
1/6/11	228	Eric Griffin	
1/6/11	229	Karen Myers	
1/6/11	230	John Gibson	
1/6/11	231	Mike Pasichnyk	
1/5/11	232	Tyson O'Connell	
1/6/11	233	Gil and Jodi Schellenger	
1/6/11	234	Gary Burnett	
12/27/10	235	Andy Hunthausen, Michael Murray and Derek Brown	Lewis and Clark County, Board of County Commissioners
1/6/11	236	John Moore	
1/6/11	237	Earl Sheldon	
1/6/11	238	Jose Acosta	
1/6/11	239	Roy O'Conner	
1/6/11	240	Joshua Lisbon	
1/6/11	241	Zack Porter	
1/6/11	242	Chris Kuntz	

Date Received	Number	Commenter Name	Organization
1/6/11	243	Gayle Joslin	
1/6/11	244	Sarah Lundstrum	
1/6/11	245	Jerome M Cain	
1/6/11	246	Carolyn Abbott	
1/6/11	247	Christine Deveny	
1/6/11	248	Tyson O'Connell	
1/6/11	249	Charles Hendrick	
1/6/11	250	Charles Hendrick	
1/6/11	251	Amie Butler	
1/6/11	252	Mark Himmel	
1/6/11	253	Jacquelyn Corday	
1/6/11	254	Gary Petersen	
1/6/11	255	Jason Brown	
1/6/11	256	Charlie McCarthy	
1/6/11	257	Dorothy Anders	
1/6/11	258	Pat Basting	
1/6/11	259	Hugh Zackheim	
1/7/11	260	Robert Blach	
1/7/11	261	Michael Covert	
1/7/11	262	Gene and Vickie Meek	
1/7/11	263	Danny and Niki Lepard	
1/7/11	264	Peter Jennings	
1/7/11	265	Kyle Ferlicka	
1/7/11	266	Chuck and Carolyn Doering	
1/7/11	267	Eric Bryson	
1/7/11	268	Greg Beardslee	Montana Mountain Bike Alliance
1/7/11	269	Tim Meloy	
1/7/11	270	Robert Saldin	
1/7/11	271	Steph Knisley	
1/7/11	272	Suzanne Aboulfadl	
1/7/11	273	David Stagliano	
1/7/11	274	Tony Feist	
1/7/11	275	Steve Seninger	
1/7/11	276	Bernie Lionberger	
1/7/11	277	Susan Miller	
1/7/11	278	Bradly Maddock	
1/7/11	279	Thomas Morarre	
1/7/11	280	Jim Sayer	
1/7/11	281	Mary Olson	
1/7/11	282	Bert Lindler	
1/7/11	283	Charlene Miller	

Date Received	Number	Commenter Name	Organization
1/7/11	284	Joe Maurier	Montana Fish, Wildlife and Parks
1/7/11	285	Michael Sedlock	
1/7/11	286	Madison Unsworth	
1/7/11	287	John Gatchell	Montana Wilderness Association
1/10/11	288	John Gatchell	Montana Wilderness Association
1/7/11	289	Joshua Hicks	The Wilderness Society
1/7/11	290	John Gatchell	
1/7/11	291	Ken Knudson	
1/7/11	292	Bob Fox	
1/7/11	293	Jesse Lee Varnado	
1/7/11	294	Randy Williams	
1/7/11	295	James Cort Harrington	
1/7/11	296	Michael Garrity	
1/7/11	297	Kalon Baughan	
1/7/11	298	Herb Monk	
1/7/11	299	Gary Ingman	
1/7/11	300	Margaret Olson	
1/7/11	301	Barbara Ross	
1/7/11	302	Kim Wilson	
1/7/11	303	Erich Weber	
1/7/11	304	Katherine Talley	
1/7/11	305	Joel Webster	
1/8/11	306	Ruth Fogt	
1/8/11	307	John and Kayleen Sanchez	
1/8/11	308	Lynn Oatman	
1/8/11	309	Mary Fauth	
1/8/11	310	Keith Gebo	
1/8/11	311	Shannon Freix	
1/9/11	312	Lynn Blair	
1/9/11	313	Stephanie Destrampe	
1/10/11	314	Mark Good	
1/7/11	315	Brian Robbins	
1/10/11	316	Brian Shovers	Last Chance Audubon Society
1/10/11	317	Bill Maloit	Back Country Horsemen of Montana
1/7/11	318	Connie and Dave Cole	
1/7/11	319	John Borgreen	Russell Country Sportsman's Association
1/10/11	320	Leslie Van Stavern Millar	percentage of the second control of the seco
1/7/11	321	John Flavel, Linda Daugherty, Michele Kegel, Damon Kegel, Matt Fuller	
1/7/11	322	Russ Ehnes	Great Falls Trail Bike Riders Association & Montana Vehicle Riders Association

Date Received	Number	Commenter Name	Organization
1/20/11	223	Janis Taylor	
1/6/11	324	Thomas Covert	
1/12/11	325	Allyson Mangum	
1/12/11	326	Don Karcewski	
1/26/11	327	Nancy Owens	
2/7/11	328	Pete Carparelli	
6/13/11	329	Pat Flowers Montana Fish, Wildlife and Pa Region 3	
6/30/11	330	Robert and Kathleen Zuelke	
10/4/11	331	Karen Porter	
12/5/11	332	Josh Hicks	The Wilderness Society
1/9/12	333	Jeanne Holmgren	
1/13/12	334	Josh Hicks	The Wilderness Society
2/20/12	335	Kornec	
7/19/12	336	Adam Rissien	Wildlands CPR

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## **Appendix C – Road Details by Alternative**

## Use Codes for Table C-1

Use code (corresponding designation on alternatives maps) <sup>1</sup>	Type of Use (corresponding designation on alternative maps)
01-RES	Roads closed to motorized use yearlong
01-RES-STO	Closed roads that are stored
01-STO	Open or seasonal roads that are stored
02-RES	Roads closed to motorized use Oct 15 – December 1
04-RES	Roads closed to motorized use December 2 – May 15
06-RES	Roads closed to wheeled motorized use yearlong
09-RES & 10-RES	Roads closed to wheeled motorized use 10/15-6/30
11-RES & 12-RES	Roads closed to wheeled motorized use 9/1-6/30
CLOSED-AQ	Roads acquired in 2011 - closed
CLOSED-LX	Roads acquired in 2009 - closed
DECOM	Roads that would be decommissioned
M-07.00	Motorized Trail - vehicles less that 50" - no seasonal restrictions
M-08.00	Motorized Trail – vehicles less than 50 inches – closed 9/1-6/30
M-08.10	Motorized Trail - vehicles less than 50" - closed 10/15-6/30
M-08.105	Motorized Trail - vehicles less than 50" - closed 10/15-5/31
MT RECONSTRUCTION	Motorized trail relocated
M-10.00	Motorized Trail - single track - no seasonal restrictions
MT NEW CONSTRUCTION	New motorized trail construction
NM & NOMTR NEW CONSTRUCTION	New non-motorized trail construction
NATURALLY RECLAIMED	Naturally decommissioned/reclaimed – not drivable
NM & NOMTR	Non-motorized trail
NM RECONSTRUCTION	Non-motorized trail relocated
OPEN-HWY LEGAL	Open highway legal vehicles - no seasonal restrictions
OPEN-LX	Roads acquired in 2009 - open
ROAD NEW CONSTRUCTION	Road new construction (prior decision made to implement for 0.18 miles in alt 1)
ROAD RECONSTRUCTION	Road relocated
UC-CLOSED	Unauthorized road or trail – closed
UC-M-07.00	Unauthorized motorized trail - no seasonal restrictions
UC -M-11.00	Unclassified motorized trail – seasonal restrictions – closed 9/1-6/30
UC-OPEN	Unauthorized road or trail - open
UC-OPEN-10	Unauthorized road seasonal restriction 10-RES, closed 10/15-6/30
OLD TRAIL	Trail to be relocated; used as an indicator only and not used in mileage calculations

<sup>1</sup> open motorized routes, motorized routes closed yearlong and motorized routes closed seasonally may receive occasional administrative use

Table C- 1a. Road details by road number and alternative organized by 5th code hydrological unit code (HUC 5)

HUC5 NAME	ID	ALT_1	ALT_2	ALT_3	ALT_4	Miles
Blackfoot River Headwaters	4083-A5	NATURAI	NATURAL RECLAIMED	DECOM	DFCOM	0.1472
Blackfoot River Headwaters	4083-A6	NATURAL	NATURAL RECLAIMED	DECOM	DECOM	0.1334
Blackfoot River Headwaters	4083-A7	NATURAL	NATURAL RECLAIMED	DECOM	DECOM	0.7815
Blackfoot River Headwaters	4083-A8	NATURAL	NATURAL RECLAIMED	DECOM	DECOM	0.2578
Blackfoot River Headwaters	4083-A9	NATURAL	NATURAL RECLAIMED	DECOM	DECOM	0.6608
Blackfoot River Headwaters	4083-B1	NATURAL	NATURAL RECLAIMED	DECOM	DECOM	0.3048
Blackfoot River Headwaters	4083-C1	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.0950
Blackfoot River Headwaters	4083-C1	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1540
Blackfoot River Headwaters	4083-C1	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.2068
Blackfoot River Headwaters	4083-C2	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.2261
Blackfoot River Headwaters	4083-C3	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.0907
Blackfoot River Headwaters	4083-C3	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1234
Blackfoot River Headwaters	4083-D1	NATURAL	NATURAL RECLAIMED	DECOM	DECOM	0.2360
Blackfoot River Headwaters	4084-A1	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	0.7673
Blackfoot River Headwaters	4084-A2	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.3364
Blackfoot River Headwaters	4084-A3	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.1333
Blackfoot River Headwaters	4085-A1	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	0.3342
Blackfoot River Headwaters	4085-A2	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	0.0430
Blackfoot River Headwaters	4085-A2	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1143
Blackfoot River Headwaters	4085-A2	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	0.1237
Blackfoot River Headwaters	4085-A3	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	0.3900
Blackfoot River Headwaters	4085-A3	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.3906
Blackfoot River Headwaters	4086-A1	OPEN-HWY LEGAL	01-STO	DECOM	DECOM	0.4356
Blackfoot River Headwaters	4086-B1	OPEN-HWY LEGAL	M-07.00	M-08.00	M-08.105	0.9229
Blackfoot River Headwaters	4086-B2	OPEN-HWY LEGAL	01-STO	DECOM	DECOM	0.5305
Blackfoot River Headwaters	4086-B3	OPEN-HWY LEGAL	M-07.00	M-08.00	M-08.105	0.2761
Blackfoot River Headwaters	4086-B4	OPEN-HWY LEGAL	M-07.00	M-08.00	M-08.105	0.0694
Blackfoot River Headwaters	4086-B5	OPEN-HWY LEGAL	M-07.00	M-08.00	M-08.105	0.2534
Blackfoot River Headwaters	4087-A1	06-RES	06-RES	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.2700
Blackfoot River Headwaters	4087-A1	06-RES	06-RES	06-RES	06-RES	0.3592
Blackfoot River Headwaters	4087-A1	06-RES	06-RES	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.4467
Blackfoot River Headwaters	4087-A1	06-RES	06-RES	06-RES	06-RES	0.9268
Blackfoot River Headwaters	4087-A2	06-RES	06-RES	06-RES	06-RES	0.2012
Blackfoot River Headwaters	4087-B1	06-RES	06-RES	DECOM	DECOM	1.8961
Blackfoot River Headwaters	4087-B2	06-RES	06-RES	DECOM	DECOM	0.8204
Blackfoot River Headwaters	4087-C1	06-RES	06-RES	DECOM	DECOM	0.2753
Blackfoot River Headwaters	4087-D1	06-RES	06-RES	06-RES	06-RES	0.3401
Blackfoot River Headwaters	4087-E1	06-RES	06-RES	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.2771
Blackfoot River Headwaters	4087-E2	06-RES	06-RES	06-RES	06-RES	0.1038

HUC5 NAME	ID	ALT_1	ALT_2	ALT_3	ALT_4	Miles
Blackfoot River Headwaters	4087-F1	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.0365
Blackfoot River Headwaters	4087-F1	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.0470
Blackfoot River Headwaters	4087-F1	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1160
Blackfoot River Headwaters	4087-G1	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.0894
Blackfoot River Headwaters	4087-H1	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.0504
Blackfoot River Headwaters	4087-I1	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.0740
Blackfoot River Headwaters	4087-J1	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.0358
Blackfoot River Headwaters	4087-J1	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.0390
Blackfoot River Headwaters	4087-K1	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.0200
Blackfoot River Headwaters	4087-K1	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1296
Blackfoot River Headwaters	4087-K1	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.1970
Blackfoot River Headwaters	4087-L1	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.2630
Blackfoot River Headwaters	4087-L1	OPEN-HWY LEGAL	OPEN-HWY LEGAL	DECOM	DECOM	0.4822
Blackfoot River Headwaters	4088-A2	NATURAL	NATURAL RECLAIMED	DECOM	DECOM	0.2987

HUC5 NAME	ID	ALT_1	ALT_2	ALT_3	ALT_4	Miles
Blackfoot River Headwaters	4090-A1	OPFN-HWY I FGAI	OPFN-HWY I FGAI	OPFN-HWY I FGAI	OPFN-HWY I FGAI	0.2283
Blackfoot River Headwaters	4090-A1	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	0.9333
Blackfoot River Headwaters	4090-B1	OPEN-HWY LEGAL	01-STO	DECOM	DECOM	0.6733
Blackfoot River Headwaters	4090-C1	OPEN-HWY LEGAL	M-07.00	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.5254
Blackfoot River Headwaters	4090-D1	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	0.2143
Blackfoot River Headwaters	4090-E1	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	0.0260
Blackfoot River Headwaters	4090-F1	OPEN-HWY LEGAL	01-STO	M-08.00	M-08.105	0.6293
Blackfoot River Headwaters	4090-G1	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	0.7859
Blackfoot River Headwaters	4108-001	UC-OPEN	OPEN-HWY LEGAL	DECOM	DECOM	0.0988
Blackfoot River Headwaters	4108-B1	NATURAL	NATURAL RECLAIMED	DECOM	DECOM	0.0385
Blackfoot River Headwaters	4108-B1	NATURAL	NATURAL RECLAIMED	DECOM	DECOM	1.0608
Blackfoot River Headwaters	4108-D1	NATURAL	NATURAL RECLAIMED	DECOM	DECOM	0.7058
Blackfoot River Headwaters	4113-A1	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.1050
Blackfoot River Headwaters	4113-A1	10-RES	10-RES	DECOM	DECOM	1.8237
Blackfoot River Headwaters	4113-A3	NATURAL	01-STO	DECOM	DECOM	0.6161
Blackfoot River Headwaters	4113-A4	NATURAL	01-STO	DECOM	DECOM	0.3929
Blackfoot River Headwaters	4113-B1	10-RES	01-STO	DECOM	DECOM	0.5653
Blackfoot River Headwaters	4113-B1	NATURAL	01-STO	DECOM	DECOM	0.6519
Blackfoot River Headwaters	4113-C1	10-RES	01-STO	01-STO	01-STO	0.1620
Blackfoot River Headwaters	PVT-1015	STATE-CLOSED	STATE-CLOSED	STATE-CLOSED	STATE-CLOSED	0.5561
Blackfoot River Headwaters	PVT-1018	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.2060
Blackfoot River Headwaters	PVT-1078	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1911
Blackfoot River Headwaters	PVT-1084	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.4605
Blackfoot River Headwaters	PVT-1102	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.4588

HUC5 NAME	ID	ALT_1	ALT_2	ALT_3	ALT_4	Miles
Blackfoot River Headwaters	PVT-1103	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1137
Blackfoot River Headwaters	PVT-1104	NO-ROW	NO-ROW	NO-ROW	NO-ROW	1.0688
Blackfoot River Headwaters	PVT-1105	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1245
Blackfoot River Headwaters	PVT-1106	NO-ROW	NO-ROW	NO-ROW	NO-ROW	1.9950
Blackfoot River Headwaters	PVT-1107	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.5104
Blackfoot River Headwaters	PVT-1108	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1869
Blackfoot River Headwaters	PVT-1109	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.9016
Blackfoot River Headwaters	PVT-1110	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.2648
Blackfoot River Headwaters	PVT-1111	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1293
Blackfoot River Headwaters	PVT-1112	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.5564
Blackfoot River Headwaters	PVT-1129	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.8735
Blackfoot River Headwaters	PVT-1130	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.3787
Blackfoot River Headwaters	PVT-1131	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1166
Blackfoot River Headwaters	PVT-1132	NO-ROW	NO-ROW	NO-ROW	NO-ROW	1.9210
Blackfoot River Headwaters	PVT-1133	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.0927
Blackfoot River Headwaters	PVT-1138	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.2826
Blackfoot River Headwaters	PVT-1142	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1099
Blackfoot River Headwaters	PVT-423	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.7221
Blackfoot River Headwaters	PVT-424	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.3298
Blackfoot River Headwaters	PVT-426	NO-ROW	NO-ROW	NO-ROW	NO-ROW	2.6519
Blackfoot River Headwaters	PVT-427	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1116
Blackfoot River Headwaters	PVT-428	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.9985
Blackfoot River Headwaters	PVT-429	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.3876
Blackfoot River Headwaters	PVT-430	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1222
Blackfoot River Headwaters	PVT-431	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.2222
Blackfoot River Headwaters	PVT-432	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1260
Blackfoot River Headwaters	PVT-433	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.2942
Blackfoot River Headwaters	PVT-434	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.2506
Blackfoot River Headwaters	PVT-435	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1422
Diadition (1) out water	1 11 100	110 11011	No Non	no non	NO NOW	V.1122
HUC5 NAME	ID	ALT_1	ALT_2	ALT_3	ALT_4	Miles
Blackfoot River Headwaters	PVT-436	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.2038
Blackfoot River Headwaters	PVT-437	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.0904
Blackfoot River Headwaters	PVT-438	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1691
Blackfoot River Headwaters	PVT-439	NO-ROW	NO-ROW	NO-ROW	NO-ROW	1.1592
Blackfoot River Headwaters	PVT-440	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.6480
Blackfoot River Headwaters	PVT-441	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.3626
Blackfoot River Headwaters	PVT-442	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.4370
Blackfoot River Headwaters	PVT-443	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.2301
Diaditioot Hiver Fleadwaters						

HUC5 NAME	ID	ALT_1	ALT_2	ALT_3	ALT_4	Miles
Blackfoot River Headwaters	PVT-445	NO-ROW	NO-ROW	NO-ROW	NO-ROW	1.2399
Blackfoot River Headwaters	PVT-446	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.3689
Blackfoot River Headwaters	PVT-447	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.2224
Blackfoot River Headwaters	PVT-448	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.3291
Blackfoot River Headwaters	PVT-449	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.2650
Blackfoot River Headwaters	PVT-450	NO-ROW	NO-ROW	NO-ROW	NO-ROW	1.6213
Blackfoot River Headwaters	PVT-451	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.7338
Blackfoot River Headwaters	PVT-452	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1001
Blackfoot River Headwaters	PVT-453	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.0755
Blackfoot River Headwaters	PVT-454	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1111
Blackfoot River Headwaters	PVT-455	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.2491
Blackfoot River Headwaters	PVT-456	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1871
Blackfoot River Headwaters	PVT-457	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.0467
Blackfoot River Headwaters	PVT-458	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.0961
Blackfoot River Headwaters	PVT-459	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.0907
Blackfoot River Headwaters	PVT-460	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.2979
Blackfoot River Headwaters	PVT-461	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.3156
Blackfoot River Headwaters	PVT-470	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.6112
Blackfoot River Headwaters	PVT-472	NO-ROW	NO-ROW	NO-ROW	NO-ROW	1.0568
Blackfoot River Headwaters	PVT-473	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1488
Blackfoot River Headwaters	PVT-474	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.0513
Blackfoot River Headwaters	PVT-475	STATE-CLOSED	STATE-CLOSED	STATE-CLOSED	STATE-CLOSED	0.3457
Blackfoot River Headwaters	PVT-482	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1229
Blackfoot River Headwaters	U-001	OPEN-LX	01-STO	DECOM	DECOM	0.5084
Blackfoot River Headwaters	U-001	OPEN-LX	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.6334
Blackfoot River Headwaters	U-001	OPEN-LX	OPEN-HWY LEGAL	DECOM	DECOM	1.8966
Blackfoot River Headwaters	U-002	OPEN-LX	01-STO	DECOM	DECOM	0.4338
Blackfoot River Headwaters	U-003	OPEN-LX	01-STO	DECOM	DECOM	0.6305
Blackfoot River Headwaters	U-004	OPEN-LX	01-STO	DECOM	DECOM	0.1710
Blackfoot River Headwaters	U-005	OPEN-LX	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	1.1439
Blackfoot River Headwaters	U-006	OPEN-LX	01-STO	DECOM	DECOM	0.4833
Blackfoot River Headwaters	U-008	OPEN-LX	01-STO	DECOM	DECOM	0.2353
Blackfoot River Headwaters	U-009	OPEN-LX	01-STO	DECOM	DECOM	0.6317
Blackfoot River Headwaters	U-010	OPEN-LX	01-STO	DECOM	DECOM	1.1098
Blackfoot River Headwaters	U-011	OPEN-LX	01-STO	DECOM	DECOM	0.1648
Blackfoot River Headwaters	U-011	OPEN-LX	01-STO	DECOM	DECOM	0.2204
Blackfoot River Headwaters	U-012	OPEN-LX	01-STO	DECOM	DECOM	0.6316
Blackfoot River Headwaters	U-012	OPEN-LX	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.8475
Blackfoot River Headwaters	U-013	OPEN-LX	OPEN-HWY LEGAL	DECOM	DECOM	0.5535
Blackfoot River Headwaters	U-014	OPEN-LX	01-STO	DECOM	DECOM	0.0981
Blackfoot River Headwaters	U-015	CLOSED-LX	01-STO	DECOM	DECOM	0.1185

HUC5 NAME	ID	ALT_1	ALT_2	ALT_3	ALT_4	Miles
Blackfoot River Headwaters	U-015	CLOSED-LX	M-08.00	M-08.00	M-08.00	1.4687
Blackfoot River Headwaters	U-017	OPEN-LX	01-STO	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.8183
Blackfoot River Headwaters	U-018	CLOSED-LX	M-08.00	01-RES	06-RES	0.6908
HUC5 NAME	ID	ALT_1	ALT_2	ALT_3	ALT_4	Miles
			_			
Blackfoot River Headwaters	11-020	CLOSED-LX	M-08.00	M-08.00	M-08.00	4.9737
Blackfoot River Headwaters	U-021	CLOSED-LX	M-08.00	01-RES	06-RES	1.1246
Blackfoot River Headwaters	U-023	CLOSED-LX	01-STO	DECOM	DECOM	1.1142
Blackfoot River Headwaters	U-024	CLOSED-LX	01-STO	DECOM	DECOM	1.1564
Blackfoot River Headwaters	U-026	CLOSED-LX	M-08.00	01-RES	06-RES	0.5369
Blackfoot River Headwaters	U-027	CLOSED-LX	M-08.00	M-08.00	M-08.00	1.4175
Blackfoot River Headwaters	U-027	CLOSED-LX	M-08.00	DECOM	DECOM	1.6788
Blackfoot River Headwaters	U-028	CLOSED-LX	M-08.00	M-08.00	M-08.00	0.4028
Blackfoot River Headwaters	U-028	CLOSED-LX	M-08.00	DECOM	DECOM	0.4409
Blackfoot River Headwaters	U-028	CLOSED-LX	01-STO	DECOM	DECOM	0.8158
Blackfoot River Headwaters	U-028	CLOSED-LX	01-STO	DECOM	DECOM	1.262
Blackfoot River Headwaters	U-028	CLOSED-LX	01-STO	DECOM	DECOM	1.678
Blackfoot River Headwaters	U-029	CLOSED-LX	01-STO	DECOM	DECOM	0.274
Blackfoot River Headwaters	U-030	CLOSED-LX	01-STO	DECOM	DECOM	0.5786
Blackfoot River Headwaters	U-030	CLOSED-LX	01-STO	DECOM	DECOM	1.0969
Blackfoot River Headwaters	U-031	CLOSED-LX	M-08.00	M-08.00	OPEN-HWY LEGAL	0.8670
Blackfoot River Headwaters	U-031	CLOSED-LX	M-08.00	DECOM	DECOM	2.9822
Blackfoot River Headwaters	U-032	CLOSED-LX	01-STO	DECOM	DECOM	0.092
Blackfoot River Headwaters	U-032	CLOSED-LX	01-STO	DECOM	DECOM	0.9540
Blackfoot River Headwaters	U-033	CLOSED-LX	01-STO	DECOM	DECOM	0.2498
Blackfoot River Headwaters	U-034	CLOSED-LX	M-08.00	M-08.00	M-08.00	1.1518
Blackfoot River Headwaters	U-035	CLOSED-LX	M-08.00	DECOM	M-08.00	0.7649
Blackfoot River Headwaters	U-035	CLOSED-LX	M-08.00	M-08.00	M-08.00	1.505
Blackfoot River Headwaters	U-036	CLOSED-LX CLOSED-LX	01-STO	DECOM	DECOM	1.816
Blackfoot River Headwaters	U-037	CLOSED-LX	01-STO	DECOM	DECOM	0.5478
Blackfoot River Headwaters	U-038	CLOSED-LX CLOSED-LX	01-STO	DECOM	DECOM	1.680
Blackfoot River Headwaters	U-038	CLOSED-LX CLOSED-LX	M-08.00	DECOM	DECOM	3.529
		**				
Blackfoot River Headwaters	U-039	CLOSED-LX	01-STO	DECOM	DECOM	0.2310
Blackfoot River Headwaters	U-039	CLOSED-LX	01-STO	DECOM	DECOM	1.0240
Blackfoot River Headwaters	U-040	CLOSED-LX	01-STO	DECOM	DECOM	1.1120
Blackfoot River Headwaters	U-041	CLOSED-LX	01-STO	DECOM	DECOM	0.306
Blackfoot River Headwaters	U-042	CLOSED-LX	01-STO	DECOM	DECOM	0.422
Blackfoot River Headwaters	U-043	CLOSED-LX	01-STO	DECOM	DECOM	0.3638
Blackfoot River Headwaters	U-043	CLOSED-LX	01-STO	DECOM	DECOM	0.6800

HUC5 NAME	ID	ALT_1	ALT_2	ALT_3	ALT_4	Miles
Blackfoot River Headwaters	U-044	CLOSED-LX	01-STO	DECOM	DECOM	0.8745
Blackfoot River Headwaters	U-044	CLOSED-LX	01-STO	06-RES	06-RES	1.1453
Blackfoot River Headwaters	U-045	CLOSED-LX	01-STO	DECOM	DECOM	0.3712
Blackfoot River Headwaters	U-045	CLOSED-LX	01-STO	DECOM	DECOM	0.7940
Blackfoot River Headwaters	U-046	CLOSED-LX	01-STO	DECOM	DECOM	0.3678
Blackfoot River Headwaters	U-047	CLOSED-LX	01-STO	DECOM	DECOM	0.5575
Blackfoot River Headwaters	U-049	UC-CLOSED	01-RES	DECOM	DECOM	0.0599
Blackfoot River Headwaters	U-049	UC-CLOSED	01-RES	DECOM	DECOM	0.7766
Blackfoot River Headwaters	U-049	UC-CLOSED	01-RES	DECOM	DECOM	1.0414
Blackfoot River Headwaters	U-050	UC-CLOSED	01-RES	DECOM	DECOM	0.1630
Blackfoot River Headwaters	U-050	UC-CLOSED	01-RES	DECOM	DECOM	0.4506
Blackfoot River Headwaters	U-055	UC-CLOSED	01-RES	DECOM	DECOM	0.2992
Blackfoot River Headwaters	U-101	UC-OPEN	01-STO	01-STO	01-STO	0.6635
Blackfoot River Headwaters	U-102	UC-OPEN	01-STO	01-STO	01-STO	0.2519
Blackfoot River Headwaters	U-1132	CLOSED-AQ	01-RES	DECOM	DECOM	0.6313
Blackfoot River Headwaters	U-1134	CLOSED-AQ	01-RES	DECOM	DECOM	0.1143
Blackfoot River Headwaters	U-1138	CLOSED-AQ	01-RES	DECOM	DECOM	1.4309
Blackfoot River Headwaters	U-1139	CLOSED-AQ	01-RES	DECOM	DECOM	0.7999
Blackfoot River Headwaters	U-1140	CLOSED-AQ	01-RES	DECOM	DECOM	0.6992
HUC5 NAME	ID	ALT 4	ALT 2	ALT 3	ALT 4	Miles
HUC3 NAME	ID	ALT_1	ALI_2	ALT_3	ALT_4	willes
Blackfoot River Headwaters	U-1141	CLOSED-AQ	01-RES	DECOM	DECOM	0.4991
Blackfoot River Headwaters Blackfoot River Headwaters	U-1141 U-119	CLOSED-AQ CLOSED-LX	01-RES 01-STO	DECOM DECOM	DECOM DECOM	0.4991 0.4822
Blackfoot River Headwaters	U-1141 U-119 U-120	CLOSED-AQ CLOSED-LX CLOSED-AQ	01-RES 01-STO 01-RES	DECOM DECOM 06-RES	DECOM DECOM 06-RES	0.4991 0.4822 0.9156
Blackfoot River Headwaters Blackfoot River Headwaters	U-1141 U-119 U-120 U-120	CLOSED-AO CLOSED-LX CLOSED-AQ CLOSED-AQ	01-RES 01-STO 01-RES 01-RES	DECOM DECOM 06-RES DECOM	DECOM DECOM 06-RES DECOM	0.4991 0.4822 0.9156 1.1245
Blackfoot River Headwaters Blackfoot River Headwaters Blackfoot River Headwaters	U-1141 U-119 U-120 U-120 U-121	CLOSED-AO CLOSED-LX CLOSED-AQ CLOSED-AQ CLOSED-AQ	01-RES 01-STO 01-RES 01-RES 01-RES	DECOM DECOM 06-RES DECOM 06-RES	DECOM DECOM 06-RES DECOM 06-RES	0.4991 0.4822 0.9156
Blackfoot River Headwaters Blackfoot River Headwaters Blackfoot River Headwaters Blackfoot River Headwaters Blackfoot River Headwaters Blackfoot River Headwaters	U-1141 U-119 U-120 U-120 U-121 U-122	CLOSED-AO CLOSED-LX CLOSED-AQ CLOSED-AQ CLOSED-AQ CLOSED-AQ	01-RES 01-STO 01-RES 01-RES 01-RES 01-RES	DECOM DECOM 06-RES DECOM 06-RES 06-RES	DECOM DECOM 06-RES DECOM 06-RES 06-RES	0.4991 0.4822 0.9156 1.1245 0.7657 0.2060
Blackfoot River Headwaters Blackfoot River Headwaters Blackfoot River Headwaters Blackfoot River Headwaters Blackfoot River Headwaters Blackfoot River Headwaters Blackfoot River Headwaters	U-1141 U-119 U-120 U-120 U-121 U-122 U-122	CLOSED-AO CLOSED-LX CLOSED-AQ CLOSED-AQ CLOSED-AQ CLOSED-AQ CLOSED-AQ	01-RES 01-STO 01-RES 01-RES 01-RES 01-RES 01-RES	DECOM DECOM 06-RES DECOM 06-RES 06-RES 06-RES	DECOM DECOM 06-RES DECOM 06-RES 06-RES	0.4991 0.4822 0.9156 1.1245 0.7657 0.2060 0.5987
Blackfoot River Headwaters	U-1141 U-119 U-120 U-120 U-121 U-122 U-122 U-123	CLOSED-AO CLOSED-LX CLOSED-AQ CLOSED-AQ CLOSED-AQ CLOSED-AQ CLOSED-AQ CLOSED-AQ	01-RES 01-STO 01-RES 01-RES 01-RES 01-RES 01-RES	DECOM DECOM 06-RES DECOM 06-RES 06-RES 06-RES DECOM	DECOM DECOM 06-RES DECOM 06-RES 06-RES DECOM	0.4991 0.4822 0.9156 1.1245 0.7657 0.2060 0.5987 0.3240
Blackfoot River Headwaters	U-1141 U-119 U-120 U-120 U-121 U-122 U-122 U-123 U-124	CLOSED-AO CLOSED-LX CLOSED-AQ CLOSED-AQ CLOSED-AQ CLOSED-AQ CLOSED-AQ CLOSED-AQ CLOSED-AQ	01-RES 01-STO 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES	DECOM DECOM 06-RES DECOM 06-RES 06-RES 06-RES DECOM DECOM	DECOM DECOM 06-RES DECOM 06-RES 06-RES 06-RES DECOM DECOM	0.4991 0.4822 0.9156 1.1245 0.7657 0.2060 0.5987 0.3240 0.3239
Blackfoot River Headwaters	U-1141 U-119 U-120 U-120 U-121 U-122 U-122 U-123 U-124 U-125	CLOSED-AO CLOSED-LX CLOSED-AQ CLOSED-AQ CLOSED-AQ CLOSED-AQ CLOSED-AQ CLOSED-AQ CLOSED-AQ CLOSED-AQ CLOSED-AQ	01-RES 01-STO 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES	DECOM DECOM 06-RES DECOM 06-RES 06-RES 06-RES DECOM DECOM DECOM	DECOM DECOM 06-RES DECOM 06-RES 06-RES 06-RES DECOM DECOM DECOM	0.4991 0.4822 0.9156 1.1245 0.7657 0.2060 0.5987 0.3240 0.3239 0.1294
Blackfoot River Headwaters	U-1141 U-119 U-120 U-120 U-121 U-122 U-122 U-123 U-124 U-125 U-126	CLOSED-AO CLOSED-LX CLOSED-AQ	01-RES 01-STO 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES	DECOM DECOM 06-RES DECOM 06-RES 06-RES DECOM DECOM DECOM DECOM	DECOM DECOM 06-RES DECOM 06-RES 06-RES 06-RES DECOM DECOM DECOM DECOM	0.4991 0.4822 0.9156 1.1245 0.7657 0.2060 0.5987 0.3240 0.3239 0.1294 0.1341
Blackfoot River Headwaters	U-1141 U-119 U-120 U-120 U-121 U-122 U-122 U-123 U-124 U-125 U-126 U-1261	CLOSED-AO CLOSED-LX CLOSED-AQ	01-RES 01-STO 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES	DECOM DECOM 06-RES DECOM 06-RES 06-RES DECOM DECOM DECOM DECOM DECOM DECOM DECOM 06-RES	DECOM DECOM 06-RES DECOM 06-RES 06-RES DECOM DECOM DECOM DECOM DECOM DECOM DECOM DECOM DECOM	0.4991 0.4822 0.9156 1.1245 0.7657 0.2060 0.5987 0.3240 0.3239 0.1294 0.1341 2.0083
Blackfoot River Headwaters	U-1141 U-119 U-120 U-120 U-121 U-122 U-122 U-123 U-124 U-125 U-126 U-1261 U-1261	CLOSED-AO CLOSED-AQ	01-RES 01-STO 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES	DECOM DECOM 06-RES DECOM 06-RES 06-RES DECOM DECOM DECOM DECOM DECOM DECOM DECOM DECOM DECOM	DECOM DECOM 06-RES DECOM 06-RES 06-RES DECOM	0.4991 0.4822 0.9156 1.1245 0.7657 0.2060 0.5987 0.3240 0.3239 0.1294 0.1341 2.0083 0.4542
Blackfoot River Headwaters	U-1141 U-119 U-120 U-120 U-121 U-122 U-122 U-123 U-124 U-125 U-126 U-1261 U-1262 U-1263	CLOSED-AO CLOSED-AQ	01-RES 01-STO 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES	DECOM DECOM 06-RES DECOM 06-RES 06-RES DECOM	DECOM DECOM 06-RES DECOM 06-RES 06-RES DECOM	0.4991 0.4822 0.9156 1.1245 0.7657 0.2060 0.5987 0.3240 0.3239 0.1294 0.1341 2.0083 0.4542 0.8096
Blackfoot River Headwaters	U-1141 U-119 U-120 U-120 U-121 U-122 U-122 U-123 U-124 U-125 U-126 U-1261 U-1261 U-1262 U-1263 U-1263	CLOSED-AO CLOSED-AQ	01-RES 01-STO 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES	DECOM DECOM 06-RES DECOM 06-RES 06-RES DECOM	DECOM DECOM 06-RES DECOM 06-RES 06-RES DECOM	0.4991 0.4822 0.9156 1.1245 0.7657 0.2060 0.5987 0.3240 0.3239 0.1294 0.1341 2.0083 0.4542 0.8096 0.7101
Blackfoot River Headwaters	U-1141 U-119 U-120 U-120 U-121 U-122 U-122 U-123 U-124 U-125 U-126 U-1261 U-1261 U-1262 U-1263 U-1264 U-1264	CLOSED-AO CLOSED-AQ	01-RES 01-STO 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES	DECOM DECOM 06-RES DECOM 06-RES 06-RES DECOM	DECOM DECOM 06-RES DECOM 06-RES 06-RES DECOM	0.4991 0.4822 0.9156 1.1245 0.7657 0.2060 0.5987 0.3240 0.3239 0.1294 0.1341 2.0083 0.4542 0.8096 0.7101 0.4789
Blackfoot River Headwaters	U-1141 U-119 U-120 U-120 U-121 U-122 U-122 U-123 U-124 U-125 U-126 U-1261 U-1262 U-1263 U-1264 U-1265 U-1265 U-1266	CLOSED-AO CLOSED-AQ	01-RES 01-STO 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES	DECOM DECOM 06-RES DECOM 06-RES 06-RES DECOM	DECOM DECOM 06-RES DECOM 06-RES 06-RES DECOM	0.4991 0.4822 0.9156 1.1245 0.7657 0.2060 0.5987 0.3240 0.3239 0.1294 0.1341 2.0083 0.4542 0.8096 0.7101 0.4789 0.8454
Blackfoot River Headwaters	U-1141 U-119 U-120 U-120 U-121 U-122 U-122 U-123 U-124 U-125 U-126 U-1261 U-1262 U-1263 U-1264 U-1265 U-1266 U-1266	CLOSED-AO CLOSED-AQ	01-RES 01-STO 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES	DECOM DECOM 06-RES DECOM 06-RES 06-RES 06-RES DECOM	DECOM DECOM 06-RES DECOM 06-RES 06-RES DECOM	0.4991 0.4822 0.9156 1.1245 0.7657 0.2060 0.5987 0.3240 0.3239 0.1294 0.1341 2.0083 0.4542 0.8096 0.7101 0.4789 0.8454 0.5786
Blackfoot River Headwaters	U-1141 U-119 U-120 U-120 U-121 U-122 U-122 U-123 U-124 U-125 U-126 U-1261 U-1262 U-1263 U-1264 U-1265 U-1265 U-1266	CLOSED-AO CLOSED-AQ	01-RES 01-STO 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES 01-RES	DECOM DECOM 06-RES DECOM 06-RES 06-RES DECOM	DECOM DECOM 06-RES DECOM 06-RES 06-RES DECOM	0.4991 0.4822 0.9156 1.1245 0.7657 0.2060 0.5987 0.3240 0.3239 0.1294 0.1341 2.0083 0.4542 0.8096 0.7101 0.4789 0.8454

HUC5 NAME	ID	ALT_1	ALT_2	ALT_3	ALT_4	Miles
Blackfoot River Headwaters	U-1274	CLOSED-AQ	01-RES	DECOM	DECOM	0.7919
Blackfoot River Headwaters	U-1841	UC-OPEN	M-07.00	M-08.00	OPEN-HWY LEGAL	0.1151
Blackfoot River Headwaters	U-1841	UC-OPEN	M-07.00	M-08.00	M-08.10	0.2776
Blackfoot River Headwaters	U-402	UC-CLOSED	01-RES	DECOM	DECOM	0.9527
Blackfoot River Headwaters	U-403	UC-CLOSED	01-RES	DECOM	DECOM	0.0007
Blackfoot River Headwaters	U-403	UC-CLOSED	01-RES	DECOM	DECOM	0.8984
Blackfoot River Headwaters	U-403	UC-CLOSED	01-RES	M-08.00	M-08.105	1.5490
Blackfoot River Headwaters	U-404	UC-CLOSED	01-RES	DECOM	DECOM	1.0164
Blackfoot River Headwaters	U-405	UC-OPEN	OPEN-HWY LEGAL	DECOM	DECOM	0.236
Blackfoot River Headwaters	U-406	UC-CLOSED	01-RES	DECOM	DECOM	0.9193
Blackfoot River Headwaters	U-407	UC-CLOSED	01-RES	DECOM	DECOM	0.4633
Blackfoot River Headwaters	U-408	UC-CLOSED	01-RES	DECOM	DECOM	0.2010
Blackfoot River Headwaters	U-409	UC-CLOSED	01-RES	DECOM	DECOM	0.1294
Blackfoot River Headwaters	U-410	UC-CLOSED	01-RES	DECOM	DECOM	0.1703
Blackfoot River Headwaters	U-411	UC-OPEN-10	10-RES	DECOM	DECOM	1.431
Blackfoot River Headwaters	U-4113	UC-OPEN-10	10-RES	DECOM	DECOM	0.223
Blackfoot River Headwaters	U-412	UC-OPEN-10	10-RES	DECOM	DECOM	0.1466
Blackfoot River Headwaters	U-413	UC-CLOSED	01-RES	DECOM	DECOM	0.1004
Blackfoot River Headwaters	U-419	UC-OPEN	M-07.00	DECOM	DECOM	0.1199
Blackfoot River Headwaters	U-420	UC-CLOSED	01-RES	DECOM	DECOM	0.2568
Blackfoot River Headwaters	U-421	UC-CLOSED	01-RES	DECOM	DECOM	0.299
Blackfoot River Headwaters	U-422	UC-CLOSED	01-RES	DECOM	DECOM	0.3068
Blackfoot River Headwaters	U-424	OPEN-LX	01-STO	DECOM	DECOM	0.0648
Blackfoot River Headwaters	U-425	OPEN-LX	01-STO	DECOM	DECOM	0.5228
Blackfoot River Headwaters	U-427	P-ALT2&3	MT NEW CONSTRUCTION	MT NEW CONSTRUCTION	MT NEW CONSTRUCTION	0.6108
Blackfoot River Headwaters	U-428	CLOSED-AQ	01-RES	DECOM	DECOM	0.303
Blackfoot River Headwaters	U-429	UC-OPEN	OPEN-HWY LEGAL	DECOM	DECOM	0.226
Blackfoot River Headwaters	U-443	UC-CLOSED	01-RES	DECOM	DECOM	0.227
Blackfoot River Headwaters	U-449	CLOSED-AQ	01-RES	DECOM	M-08.00	0.165
Blackfoot River Headwaters	U-NEW-005	P-ALT2&3	ROAD NEW CONSTRUCTION	ROAD NEW CONSTRUCTION	ROAD NEW CONSTRUCTION	0.178
Blackfoot River Headwaters	U-NEW2	P-ALT2	MT NEW CONSTRUCTION	P-ALT2	P-ALT2	0.118
Blackfoot River Headwaters	U-NEW3	P-ALT2	MT NEW CONSTRUCTION	P-ALT2	P-ALT2	0.259
Blackfoot River Headwaters	U-NEW-4090	P-ALT3	P-ALT3	MT NEW CONSTRUCTION	MT NEW CONSTRUCTION	0.000
Blackfoot River Headwaters	U-NEW-4090	P-ALT3	P-ALT3	MT NEW CONSTRUCTION	MT NEW CONSTRUCTION	0.388
HUC5 NAME	ID	ALT 1	ALT 2	ALT 3	ALT 4	Miles

HUC5 NAME	ID	ALT_1	ALT_2	ALT_3	ALT_4	Miles
Blackfoot River Headwaters Blackfoot River Headwaters	U-NEW-4090-C U-NEW6	P-ALT3 P-ALT4	P-ALT3 P-ALT4	MT NEW CONSTRUCTION P-ALT4	MT NEW CONSTRUCTION MT NEW CONSTRUCTION	0.0893 0.5725
Blackfoot River-Cottonwood Creek	200	14	14	14	14	3.5553
Blackfoot River-Cottonwood Creek	COOPER'S LAKE ROAD	15	15	15	15	0.1773

HUC5 NAME	ID	ALT_1	ALT_2	ALT_3	ALT_4	Miles
Blackfoot River-Cottonwood Creek	HIGHWAY 141	14	14	14	14	1.9802
Blackfoot River-Keep Cool Creek	200	14	14	14	14	0.8180
Blackfoot River-Keep Cool Creek	200	14	14	14	14	9.3381
Blackfoot River-Keep Cool Creek	200	14	14	14	14	10.5558
Blackfoot River-Keep Cool Creek	329	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	3.3769
Blackfoot River-Keep Cool Creek	329	15	15	15	15	4.7000
Blackfoot River-Keep Cool Creek	401	M-07.00	NM	NM	NM	1.6857
Blackfoot River-Keep Cool Creek	404	M-07.00	NM	NM	NM	0.4501
Blackfoot River-Keep Cool Creek	404	M-07.00	NM	NM	NM	1.0790
Blackfoot River-Keep Cool Creek	417	M-07.00	M-07.00	M-08.00	M-08.10	0.0145
Blackfoot River-Keep Cool Creek	417	M-07.00	M-07.00	M-08.00	M-08.10	0.0410
Blackfoot River-Keep Cool Creek	417	M-07.00	M-07.00	M-08.00	OLD TRAIL	0.0459
Blackfoot River-Keep Cool Creek	417	M-07.00	M-07.00	M-08.00	OLD TRAIL	0.0983
Blackfoot River-Keep Cool Creek	417	M-07.00	M-07.00	M-08.00	M-08.10	0.1142
Blackfoot River-Keep Cool Creek	417	M-07.00	M-07.00	M-08.00	M-08.10	0.1362
Blackfoot River-Keep Cool Creek	417	M-07.00	M-07.00	M-08.00	OLD TRAIL	0.2430
Blackfoot River-Keep Cool Creek	417	M-07.00	M-07.00	M-08.00	OLD TRAIL	0.4380
Blackfoot River-Keep Cool Creek	417	M-07.00	M-07.00	M-08.00	M-08.10	0.6997
Blackfoot River-Keep Cool Creek	417	M-07.00	M-07.00	M-08.00	OLD TRAIL	0.8528
Blackfoot River-Keep Cool Creek	418	M-10.00	NM	NM	NM	0.0056
Blackfoot River-Keep Cool Creek	418	M-07.00	M-10.00	NM	NM	1.5012
Blackfoot River-Keep Cool Creek	418	M-10.00	M-10.00	NM	NM	2.0056
Blackfoot River-Keep Cool Creek	440	ROAD-OPEN	ROAD-OPEN	ROAD-OPEN	ROAD-OPEN	0.0024
Blackfoot River-Keep Cool Creek	440	ROAD-OPEN	ROAD-OPEN	ROAD-OPEN	ROAD-OPEN	0.0026
Blackfoot River-Keep Cool Creek	440	ROAD-OPEN	M-07.00	M-08.00	M-08.10	0.0043
Blackfoot River-Keep Cool Creek	440	ROAD-OPEN	ROAD-OPEN	ROAD-OPEN	ROAD-OPEN	0.0080
Blackfoot River-Keep Cool Creek	440	ROAD-OPEN	M-07.00	NM	NOMTR	0.0093
Blackfoot River-Keep Cool Creek	440	ROAD-OPEN	ROAD-OPEN	ROAD-OPEN	ROAD-OPEN	0.0114
Blackfoot River-Keep Cool Creek	440	ROAD-OPEN	ROAD-OPEN	ROAD-OPEN	ROAD-OPEN	0.0122
Blackfoot River-Keep Cool Creek	440	ROAD-OPEN	M-07.00	M-08.00	M-08.10	0.0125
Blackfoot River-Keep Cool Creek	440	ROAD-OPEN	ROAD-OPEN	ROAD-OPEN	ROAD-OPEN	0.0184
Blackfoot River-Keep Cool Creek	440	M-07.00	M-07.00	NM	OLD TRAIL	0.0532
Blackfoot River-Keep Cool Creek	440	ROAD-OPEN	M-07.00	NM	NM	0.0703
Blackfoot River-Keep Cool Creek	440	ROAD-OPEN	ROAD-OPEN	NM	OLD TRAIL	0.0832
Blackfoot River-Keep Cool Creek	440	ROAD-OPEN	ROAD-OPEN	ROAD-OPEN	ROAD-OPEN	0.0974
Blackfoot River-Keep Cool Creek	440	ROAD-OPEN	M-07.00	NM	OLD TRAIL	0.1391
Blackfoot River-Keep Cool Creek	440	M-07.00	M-07.00	NM	OLD TRAIL	0.3325
Blackfoot River-Keep Cool Creek	440	ROAD-OPEN	M-07.00	NM	NM	0.3957
Blackfoot River-Keep Cool Creek	440	M-10.00	M-10.00	NM	NOMTR	0.4650
Blackfoot River-Keep Cool Creek	440	ROAD-OPEN	ROAD-OPEN	ROAD-OPEN	ROAD-OPEN	0.4862
Blackfoot River-Keep Cool Creek	440	M-07.00	M-07.00	NM	NM	0.4973

HUC5 NAME	ID	ALT_1	ALT_2	ALT_3	ALT_4	Miles
Blackfoot River-Keep Cool Creek	440	M-10.00	M-10.00	NM	NOMTR	0.7083
Blackfoot River-Keep Cool Creek	440	ROAD-OPEN	M-07.00	NM	NOMTR	0.9617
Blackfoot River-Keep Cool Creek	467	M-07.00	M-07.00	NM	OLD TRAIL	0.0144
Blackfoot River-Keep Cool Creek	467	M-07.00	M-07.00	NM	M-08.10	0.0181
Blackfoot River-Keep Cool Creek	467	M-07.00	M-07.00	NM	M-08.10	0.1825
Blackfoot River-Keep Cool Creek	467	M-07.00	M-07.00	NM	M-08.10	0.1977
Blackfoot River-Keep Cool Creek	467	M-07.00	M-07.00	NM	OLD TRAIL	0.2806
Blackfoot River-Keep Cool Creek	467	M-07.00	M-07.00	NM	OLD TRAIL	0.3406
HUC5 NAME	ID	ALT_1	ALT_2	ALT_3	ALT_4	Miles
Blackfoot River-Keep Cool Creek	467	M-07.00	M-07.00	NM	M-08.10	0.3446
Blackfoot River-Keep Cool Creek	467	M-07.00	M-07.00	NM	M-08.10	0.3702
Blackfoot River-Keep Cool Creek	467	M-07.00	M-07.00	NM	OLD TRAIL	0.3914
Blackfoot River-Keep Cool Creek	467	M-07.00	M-07.00	NM	OLD TRAIL	0.4587
Blackfoot River-Keep Cool Creek	467	M-07.00	M-07.00	NM	OLD TRAIL	0.6686
Blackfoot River-Keep Cool Creek	467	M-07.00	M-07.00	NM	M-08.10	1.0715
Blackfoot River-Keep Cool Creek	467	M-07.00	M-07.00	NM	M-08.10	1.7294
Blackfoot River-Keep Cool Creek	482	NM	NM	NOMTR-FS	NOMTR-FS	1.7940
Blackfoot River-Keep Cool Creek	482	NM	NM	NOMTR-FS	NOMTR-FS	2.5000
Blackfoot River-Keep Cool Creek	485	M-07.00	NM	NM	NM	0.0975
Blackfoot River-Keep Cool Creek	485	M-07.00	NM	NM	NOMTR	0.5268
Blackfoot River-Keep Cool Creek	485	M-07.00	NM	NM	NOMTR	1.6437
Blackfoot River-Keep Cool Creek	485	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	4.2536
Blackfoot River-Keep Cool Creek	487	M-10.00	M-10.00	NOMTR	DECOM	0.5053
Blackfoot River-Keep Cool Creek	487	M-10.00	M-10.00	NOMTR	DECOM	2.3884
Blackfoot River-Keep Cool Creek	488	NM	NM	NOMTR-FS	NOMTR-FS	2.5000
Blackfoot River-Keep Cool Creek	601	15	15	15	15	0.0014
Blackfoot River-Keep Cool Creek	601	15	15	15	15	0.0070
Blackfoot River-Keep Cool Creek	601	15	15	15	15	0.0437
Blackfoot River-Keep Cool Creek	601	15	15	15	15	0.1279
Blackfoot River-Keep Cool Creek	601	15	15	15	15	0.4629
Blackfoot River-Keep Cool Creek	601	15	15	15	15	0.5190
Blackfoot River-Keep Cool Creek	601	15	15	15	15	0.6185
Blackfoot River-Keep Cool Creek	601	15	15	15	15	1.0360
Blackfoot River-Keep Cool Creek	601	15	15	15	15	1.0577
Blackfoot River-Keep Cool Creek	601	15	15	15	15	1.1182
Blackfoot River-Keep Cool Creek	601	15	15	15	15	1.1357
Blackfoot River-Keep Cool Creek	601	15	15	15	15	1.1685
Blackfoot River-Keep Cool Creek	601	15	15	15	15	2.9225
Blackfoot River-Keep Cool Creek	601	15	15	15	15	4.6325

HUC5 NAME	ID	ALT_1	ALT_2	ALT_3	ALT_4	Miles
Blackfoot River-Keep Cool Creek	607	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	4.1212
Blackfoot River-Keep Cool Creek	626	15	15	15	15	0.6580
Blackfoot River-Keep Cool Creek	626	STATE	STATE	STATE	STATE	0.9390
Blackfoot River-Keep Cool Creek	626	15	15	15	15	1.8536
Blackfoot River-Keep Cool Creek	626	NO-ROW	NO-ROW	NO-ROW	NO-ROW	1.8861
Blackfoot River-Keep Cool Creek	1104	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.1495
Blackfoot River-Keep Cool Creek	1163	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.0004
Blackfoot River-Keep Cool Creek	1163	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	5.7490
Blackfoot River-Keep Cool Creek	1800	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.1001
Blackfoot River-Keep Cool Creek	1800	15	15	15	15	1.2000
Blackfoot River-Keep Cool Creek	1800	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	8.7889
Blackfoot River-Keep Cool Creek	1804	06-RES	06-RES	06-RES	06-RES	0.4046
Blackfoot River-Keep Cool Creek	1806	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.5000
Blackfoot River-Keep Cool Creek	1806	NATURAL	NATURAL RECLAIMED	DECOM	DECOM	1.7109
Blackfoot River-Keep Cool Creek	1821	02-RES	11-RES	M-08.00	M-08.10	1.5872
Blackfoot River-Keep Cool Creek	1821	02-RES	11-RES	01-RES-STO	06-RES	3.5257
Blackfoot River-Keep Cool Creek	1824	06-RES	06-RES	06-RES	06-RES	3.4606
Blackfoot River-Keep Cool Creek	1824	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	5.0780
Blackfoot River-Keep Cool Creek	1825	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.0024
Blackfoot River-Keep Cool Creek	1825	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.0974
Blackfoot River-Keep Cool Creek	1825	11-RES	01-STO	01-STO	01-RES	0.1590
Blackfoot River-Keep Cool Creek	1825	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.2570
Blackfoot River-Keep Cool Creek	1825	11-RES	01-STO	01-STO	01-STO	0.3088
HUC5 NAME	ID	ALT_1	ALT_2	ALT_3	ALT_4	Miles

HUC5 NAME	ID	ALT_1	ALT_2	ALT_3	ALT_4	Miles
Blackfoot River-Keen Cool Creek	1825	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0 7442
Blackfoot River-Keep Cool Creek	1825	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	1.3769
Blackfoot River-Keep Cool Creek	1826	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	2.1591
Blackfoot River-Keep Cool Creek	1826	10-RES	10-RES	12-RES	12-RES	4.7636
Blackfoot River-Keep Cool Creek	1827	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.0184
Blackfoot River-Keep Cool Creek	1827	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.6027
Blackfoot River-Keep Cool Creek	1829	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.0766
Blackfoot River-Keep Cool Creek	1834	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.1591
Blackfoot River-Keep Cool Creek	1837	06-RES	06-RES	06-RES	06-RES	0.6634
Blackfoot River-Keep Cool Creek	1837	06-RES	06-RES	06-RES	06-RES	1.1000
Blackfoot River-Keep Cool Creek	1838	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	1.5700
Blackfoot River-Keep Cool Creek	1838	10-RES	10-RES	12-RES	12-RES	4.0891
Blackfoot River-Keep Cool Creek	1839	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.6800
Blackfoot River-Keep Cool Creek	1839	NATURAL	NATURAL RECLAIMED	DECOM	DECOM	1.9738

HUC5 NAME	ID	ALT_1	ALT_2	ALT_3	ALT_4	Miles
Blackfoot River-Keep Cool Creek	1842	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	09-RES	3.0795
Blackfoot River-Keep Cool Creek	1843	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	01-STO	1.1587
Blackfoot River-Keep Cool Creek	1844	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	01-STO	0.6144
Blackfoot River-Keep Cool Creek	1873	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.5332
Blackfoot River-Keep Cool Creek	1879	OPEN-HWY LEGAL	M-07.00	NM	DECOM	0.5053
Blackfoot River-Keep Cool Creek	1879	OPEN-HWY LEGAL	M-07.00	NM	DECOM	1.0364
Blackfoot River-Keep Cool Creek	1881	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.1604
Blackfoot River-Keep Cool Creek	1881	06-RES	06-RES	06-RES	06-RES	1.3545
Blackfoot River-Keep Cool Creek	1884	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.0114
Blackfoot River-Keep Cool Creek	1884	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.8212
Blackfoot River-Keep Cool Creek	1886	09-RES	01-STO	01-STO	01-STO	2.7123
Blackfoot River-Keep Cool Creek	1891	09-RES	09-RES	11-RES	09-RES	0.4501
Blackfoot River-Keep Cool Creek	1891	09-RES	09-RES	11-RES	09-RES	0.5366
Blackfoot River-Keep Cool Creek	1892	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	4.8506
Blackfoot River-Keep Cool Creek	1892	06-RES	06-RES	06-RES	06-RES	5.1654
Blackfoot River-Keep Cool Creek	1893	06-RES	06-RES	06-RES	06-RES	2.3960
Blackfoot River-Keep Cool Creek	4043	12-RES	01-STO	01-STO	01-STO	1.0052
Blackfoot River-Keep Cool Creek	4043	12-RES	12-RES	M-08.00	M-08.105	1.0601
Blackfoot River-Keep Cool Creek	4043	12-RES	12-RES	12-RES	09-RES	1.0908
Blackfoot River-Keep Cool Creek	4050	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	0.3773
Blackfoot River-Keep Cool Creek	4106	15	15	15	15	0.3000
Blackfoot River-Keep Cool Creek	4106	15	15	15	15	0.7000
Blackfoot River-Keep Cool Creek	4106	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	3.6342
Blackfoot River-Keep Cool Creek	4106	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	9.5000
Blackfoot River-Keep Cool Creek	4112	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.1394
Blackfoot River-Keep Cool Creek	4133	OPEN-HWY LEGAL	OPEN-HWY LEGAL	01-RES	OPEN-HWY LEGAL	1.0760
Blackfoot River-Keep Cool Creek	4134	15	15	15	15	0.3620
Blackfoot River-Keep Cool Creek	4134	15	15	15	15	1.0040
Blackfoot River-Keep Cool Creek	4134	15	15	15	15	2.9959
Blackfoot River-Keep Cool Creek	4135	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.1143
Blackfoot River-Keep Cool Creek	4135	09-RES	09-RES	11-RES	09-RES	2.8177
Blackfoot River-Keep Cool Creek	1104-A1	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.2867
Blackfoot River-Keep Cool Creek	1104-B1	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.2730
Blackfoot River-Keep Cool Creek	1163-001	OPEN-HWY LEGAL	OPEN-HWY LEGAL	DECOM	DECOM	0.5388
Blackfoot River-Keep Cool Creek	1163-002	OPEN-HWY LEGAL	OPEN-HWY LEGAL	DECOM	DECOM	0.1652
Blackfoot River-Keep Cool Creek	1163-A1	09-RES	09-RES	11-RES	11-RES	2.2678
Blackfoot River-Keep Cool Creek	1163-A2	01-RES	01-RES-STO	01-RES-STO	01-RES-STO	0.2796
Blackfoot River-Keep Cool Creek	1163-A3	09-RES	09-RES	11-RES	11-RES	2.0652
Blackfoot River-Keep Cool Creek	1163-A4	09-RES	09-RES	11-RES	11-RES	0.5368

Blackfoot River-Keep Cool Creek 1163-B1 OPEN-HWY LEGAL OPEN-HWY LE	11-RFS OPEN-HWY LEGAL OPEN-HWY LEGAL 11-RES 11-RES 11-RES	0.1796 0.0004 0.3586 1.7961
Blackfoot River-Keep Cool Creek         1163-B1         OPEN-HWY LEGAL         OPEN-HWY LEGAL         OPEN-HWY LEGAL           Blackfoot River-Keep Cool Creek         1163-B1         09-RES         09-RES         11-RES           Blackfoot River-Keep Cool Creek         1163-B2         09-RES         09-RES         11-RES           Blackfoot River-Keep Cool Creek         1163-B3         09-RES         09-RES         11-RES           Blackfoot River-Keep Cool Creek         1163-B4         09-RES         09-RES         11-RES           Blackfoot River-Keep Cool Creek         1163-B5         09-RES         09-RES         11-RES           Blackfoot River-Keep Cool Creek         1163-C1         01-RES         09-RES         11-RES           Blackfoot River-Keep Cool Creek         1163-C2         OPEN-HWY LEGAL         OPEN-HWY LEGAL         OPEN-HWY LEGAL           Blackfoot River-Keep Cool Creek         1163-C3         09-RES         09-RES         11-RES           Blackfoot River-Keep Cool Creek         1163-C3         09-RES         09-RES         11-RES           Blackfoot River-Keep Cool Creek         1163-C3         09-RES         09-RES         09-RES           Blackfoot River-Keep Cool Creek         1800-A1         OPEN-HWY LEGAL         OPEN-HWY LEGAL         OPEN-HWY LEGAL	OPEN-HWY LEGAL 11-RES 11-RES	0.3586
Blackfoot River-Keep Cool Creek         1163-B1         09-RES         09-RES         11-RES           Blackfoot River-Keep Cool Creek         1163-B2         09-RES         09-RES         11-RES           Blackfoot River-Keep Cool Creek         1163-B3         09-RES         09-RES         11-RES           Blackfoot River-Keep Cool Creek         1163-B4         09-RES         09-RES         11-RES           Blackfoot River-Keep Cool Creek         1163-B5         09-RES         09-RES         11-RES           Blackfoot River-Keep Cool Creek         1163-C1         01-RES         09-RES         11-RES           Blackfoot River-Keep Cool Creek         1163-C2         OPEN-HWY LEGAL         OPEN-HWY LEGAL         OPEN-HWY LEGAL           Blackfoot River-Keep Cool Creek         1163-J1         01-RES         09-RES         11-RES           Blackfoot River-Keep Cool Creek         1163-J1         01-RES         OPEN-HWY LEGAL         OPEN-HWY LEGAL           Blackfoot River-Keep Cool Creek         1800-A1         OPEN-HWY LEGAL         OPEN-HWY LEGAL         OPEN-HWY LEGAL           Blackfoot River-Keep Cool Creek         1800-A2         01-RES         01-RES-STO         01-RES-STO           Blackfoot River-Keep Cool Creek         1800-A3         01-RES         01-RES         01-RES	11-RES 11-RES	
Blackfoot River-Keep Cool Creek         1163-B2         09-RES         09-RES         11-RES           Blackfoot River-Keep Cool Creek         1163-B3         09-RES         09-RES         11-RES           Blackfoot River-Keep Cool Creek         1163-B4         09-RES         09-RES         11-RES           Blackfoot River-Keep Cool Creek         1163-B5         09-RES         09-RES         11-RES           Blackfoot River-Keep Cool Creek         1163-C1         01-RES         09-RES         11-RES           Blackfoot River-Keep Cool Creek         1163-C2         OPEN-HWY LEGAL         OPEN-HWY LEGAL         OPEN-HWY LEGAL           Blackfoot River-Keep Cool Creek         1163-J1         01-RES         09-RES         11-RES           Blackfoot River-Keep Cool Creek         1800-A1         OPEN-HWY LEGAL         OPEN-HWY LEGAL         OPEN-HWY LEGAL           Blackfoot River-Keep Cool Creek         1800-A2         01-RES         01-RES-STO         01-RES-STO           Blackfoot River-Keep Cool Creek         1800-A3         01-RES         01-RES         01-RES           Blackfoot River-Keep Cool Creek         1800-A4         01-RES         01-RES         01-RES           Blackfoot River-Keep Cool Creek         1800-B2         01-RES         01-RES         01-RES	11-RES	1.7961
Blackfoot River-Keep Cool Creek         1163-B3         09-RES         09-RES         11-RES           Blackfoot River-Keep Cool Creek         1163-B4         09-RES         09-RES         11-RES           Blackfoot River-Keep Cool Creek         1163-B5         09-RES         09-RES         11-RES           Blackfoot River-Keep Cool Creek         1163-C1         01-RES         09-RES         09-RES           Blackfoot River-Keep Cool Creek         1163-C2         OPEN-HWY LEGAL         OPEN-HWY LEGAL         OPEN-HWY LEGAL           Blackfoot River-Keep Cool Creek         1163-J1         01-RES         09-RES         09-RES           Blackfoot River-Keep Cool Creek         1800-A1         OPEN-HWY LEGAL         OPEN-HWY LEGAL         OPEN-HWY LEGAL           Blackfoot River-Keep Cool Creek         1800-A2         01-RES         01-RES-STO         01-RES-STO           Blackfoot River-Keep Cool Creek         1800-A3         01-RES         01-RES         01-RES           Blackfoot River-Keep Cool Creek         1800-A4         01-RES         01-RES         01-RES           Blackfoot River-Keep Cool Creek         1800-B1         06-RES         06-RES         06-RES           Blackfoot River-Keep Cool Creek         1800-B2         01-RES         01-RES         01-RES		
Blackfoot River-Keep Cool Creek         1163-B4         09-RES         09-RES         11-RES           Blackfoot River-Keep Cool Creek         1163-B5         09-RES         09-RES         11-RES           Blackfoot River-Keep Cool Creek         1163-C1         01-RES         09-RES         11-RES           Blackfoot River-Keep Cool Creek         1163-C2         OPEN-HWY LEGAL         OPEN-HWY LEGAL         OPEN-HWY LEGAL           Blackfoot River-Keep Cool Creek         1163-C3         09-RES         09-RES         11-RES           Blackfoot River-Keep Cool Creek         1163-J1         01-RES         OPEN-HWY LEGAL         OPEN-HWY LEGAL           Blackfoot River-Keep Cool Creek         1800-A1         OPEN-HWY LEGAL         OPEN-HWY LEGAL         OPEN-HWY LEGAL           Blackfoot River-Keep Cool Creek         1800-A2         01-RES         01-RES-STO         01-RES-STO           Blackfoot River-Keep Cool Creek         1800-A3         01-RES         01-RES         01-RES           Blackfoot River-Keep Cool Creek         1800-A4         01-RES         01-RES         01-RES           Blackfoot River-Keep Cool Creek         1800-B1         06-RES         06-RES         06-RES           Blackfoot River-Keep Cool Creek         1800-B2         01-RES         01-RES         01-RES	11-RFS	2.7148
Blackfoot River-Keep Cool Creek         1163-B5         09-RES         09-RES         11-RES           Blackfoot River-Keep Cool Creek         1163-C1         01-RES         09-RES         11-RES           Blackfoot River-Keep Cool Creek         1163-C2         OPEN-HWY LEGAL         OPEN-HWY LEGAL         OPEN-HWY LEGAL           Blackfoot River-Keep Cool Creek         1163-C3         09-RES         09-RES         11-RES           Blackfoot River-Keep Cool Creek         1163-J1         01-RES         OPEN-HWY LEGAL         OPEN-HWY LEGAL           Blackfoot River-Keep Cool Creek         1800-A1         OPEN-HWY LEGAL         OPEN-HWY LEGAL         OPEN-HWY LEGAL           Blackfoot River-Keep Cool Creek         1800-A2         01-RES         01-RES-STO         01-RES-STO           Blackfoot River-Keep Cool Creek         1800-A3         01-RES         01-RES         01-RES           Blackfoot River-Keep Cool Creek         1800-A4         01-RES         01-RES         01-RES           Blackfoot River-Keep Cool Creek         1800-B1         06-RES         06-RES         06-RES           Blackfoot River-Keep Cool Creek         1800-B2         01-RES         01-RES         01-RES           Blackfoot River-Keep Cool Creek         1800-B3         01-RES         01-RES         01-RES	11.1120	0.7066
Blackfoot River-Keep Cool Creek         1163-C1         01-RES         09-RES         11-RES           Blackfoot River-Keep Cool Creek         1163-C2         OPEN-HWY LEGAL         OPEN-HWY LEGAL         OPEN-HWY LEGAL           Blackfoot River-Keep Cool Creek         1163-C3         09-RES         09-RES         11-RES           Blackfoot River-Keep Cool Creek         1163-J1         01-RES         OPEN-HWY LEGAL         OPEN-HWY LEGAL           Blackfoot River-Keep Cool Creek         1800-A1         OPEN-HWY LEGAL         OPEN-HWY LEGAL         OPEN-HWY LEGAL           Blackfoot River-Keep Cool Creek         1800-A2         01-RES         01-RES-STO         01-RES-STO           Blackfoot River-Keep Cool Creek         1800-A3         01-RES         01-RES         01-RES           Blackfoot River-Keep Cool Creek         1800-A4         01-RES         01-RES         01-RES           Blackfoot River-Keep Cool Creek         1800-B1         06-RES         06-RES         06-RES           Blackfoot River-Keep Cool Creek         1800-B2         01-RES         01-RES         01-RES           Blackfoot River-Keep Cool Creek         1800-B3         01-RES         01-RES         01-RES	11-RES	0.3889
Blackfoot River-Keep Cool Creek         1163-C2         OPEN-HWY LEGAL         OPEN-HWY LEGAL         OPEN-HWY LEGAL           Blackfoot River-Keep Cool Creek         1163-C3         09-RES         09-RES         11-RES           Blackfoot River-Keep Cool Creek         1163-J1         01-RES         OPEN-HWY LEGAL         OPEN-HWY LEGAL           Blackfoot River-Keep Cool Creek         1800-A1         OPEN-HWY LEGAL         OPEN-HWY LEGAL         OPEN-HWY LEGAL           Blackfoot River-Keep Cool Creek         1800-A2         01-RES         01-RES-STO         01-RES-STO           Blackfoot River-Keep Cool Creek         1800-A3         01-RES         01-RES         01-RES           Blackfoot River-Keep Cool Creek         1800-A4         01-RES         01-RES         01-RES           Blackfoot River-Keep Cool Creek         1800-B1         06-RES         06-RES         06-RES           Blackfoot River-Keep Cool Creek         1800-B2         01-RES         01-RES         01-RES           Blackfoot River-Keep Cool Creek         1800-B3         01-RES         01-RES         01-RES	11-RES	0.2240
Blackfoot River-Keep Cool Creek         1163-C3         09-RES         09-RES         11-RES           Blackfoot River-Keep Cool Creek         1163-J1         01-RES         OPEN-HWY LEGAL         OPEN-HWY LEGAL           Blackfoot River-Keep Cool Creek         1800-A1         OPEN-HWY LEGAL         OPEN-HWY LEGAL         OPEN-HWY LEGAL           Blackfoot River-Keep Cool Creek         1800-A2         01-RES         01-RES         01-RES           Blackfoot River-Keep Cool Creek         1800-A3         01-RES         01-RES         01-RES           Blackfoot River-Keep Cool Creek         1800-A4         01-RES         01-RES         01-RES           Blackfoot River-Keep Cool Creek         1800-B1         06-RES         06-RES         06-RES           Blackfoot River-Keep Cool Creek         1800-B2         01-RES         01-RES         01-RES           Blackfoot River-Keep Cool Creek         1800-B3         01-RES         01-RES         01-RES	11-RES	0.6574
Blackfoot River-Keep Cool Creek         1163-J1         01-RES         OPEN-HWY LEGAL         OPEN-	OPEN-HWY LEGAL	0.2077
Blackfoot River-Keep Cool Creek         1163-J1         01-RES         OPEN-HWY LEGAL         OPEN-	11-RES	0.1914
Blackfoot River-Keep Cool Creek         1800-A2         01-RES         01-RES-STO         01-RES-STO           Blackfoot River-Keep Cool Creek         1800-A3         01-RES         01-RES         01-RES           Blackfoot River-Keep Cool Creek         1800-A4         01-RES         01-RES         01-RES           Blackfoot River-Keep Cool Creek         1800-B1         06-RES         06-RES         06-RES           Blackfoot River-Keep Cool Creek         1800-B2         01-RES         01-RES         01-RES           Blackfoot River-Keep Cool Creek         1800-B3         01-RES         01-RES         01-RES	OPEN-HWY LEGAL	0.2371
Blackfoot River-Keep Cool Creek         1800-A3         01-RES         01-RES           Blackfoot River-Keep Cool Creek         1800-A4         01-RES         01-RES           Blackfoot River-Keep Cool Creek         1800-B1         06-RES         06-RES           Blackfoot River-Keep Cool Creek         1800-B2         01-RES         01-RES           Blackfoot River-Keep Cool Creek         1800-B3         01-RES         01-RES           01-RES         01-RES         01-RES	DECOM	1.2345
Blackfoot River-Keep Cool Creek         1800-A4         01-RES         01-RES         01-RES           Blackfoot River-Keep Cool Creek         1800-B1         06-RES         06-RES         06-RES           Blackfoot River-Keep Cool Creek         1800-B2         01-RES         01-RES         01-RES           Blackfoot River-Keep Cool Creek         1800-B3         01-RES         01-RES         01-RES	DECOM	0.1814
Blackfoot River-Keep Cool Creek         1800-A4         01-RES         01-RES         01-RES           Blackfoot River-Keep Cool Creek         1800-B1         06-RES         06-RES         06-RES           Blackfoot River-Keep Cool Creek         1800-B2         01-RES         01-RES         01-RES           Blackfoot River-Keep Cool Creek         1800-B3         01-RES         01-RES         01-RES	DECOM	0.3982
Blackfoot River-Keep Cool Creek         1800-B1         06-RES         06-RES           Blackfoot River-Keep Cool Creek         1800-B2         01-RES         01-RES           Blackfoot River-Keep Cool Creek         1800-B3         01-RES         01-RES           01-RES         01-RES         01-RES	DECOM	0.0267
Blackfoot River-Keep Cool Creek1800-B201-RES01-RES01-RESBlackfoot River-Keep Cool Creek1800-B301-RES01-RES01-RES	06-RES	1.7201
Blackfoot River-Keep Cool Creek 1800-B3 01-RES 01-RES 01-RES	06-RES	0.3080
	06-RES	0.5044
Blackfoot River-Keep Cool Creek 1800-B4 01-RES 01-RES 01-RES	06-RES	0.1424
Blackfoot River-Keep Cool Creek 1800-B5 01-RES 01-RES 01-RES	06-RES	0.0975
Blackfoot River-Keep Cool Creek 1800-C1 01-RES 01-RES-STO 01-RES-STO	01-RES-STO	0.2006
Blackfoot River-Keep Cool Creek 1800-C1 01-RES 01-RES-STO 01-RES-STO	01-RES-STO	0.5512
Blackfoot River-Keep Cool Creek 1804-A1 06-RES 06-RES 06-RES	06-RES	0.3569
Blackfoot River-Keep Cool Creek 1804-B1 06-RES 06-RES 06-RES	06-RES	1.4479
Blackfoot River-Keep Cool Creek 1821-A1 01-RES 01-RES-STO 01-RES-STO	01-RES-STO	0.6692
Blackfoot River-Keep Cool Creek 1821-B1 01-RES 01-RES-STO M-08.00	M-08.10	0.5910
Blackfoot River-Keep Cool Creek 1821-B1-NEW P-ALT3 P-ALT3 MT NEW CONSTRUCTION		0.1532
Blackfoot River-Keep Cool Creek 1821-C1 01-RES 01-RES-STO 01-RES-STO	01-RES-STO	0.9373
Blackfoot River-Keep Cool Creek 1824-A1 OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.3328
Blackfoot River-Keep Cool Creek 1824-B1 OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL	OPEN-HWY LEGAL	2.0712
Blackfoot River-Keep Cool Creek 1824-B2 01-RES 01-RES-STO 01-RES-STO	01-RES-STO	0.5015
Blackfoot River-Keep Cool Creek 1824-C1 06-RES 06-RES 06-RES	M-08.105	1.6654
Blackfoot River-Keep Cool Creek 1824-D1 06-RES 06-RES 06-RES	01-STO	0.4924
Blackfoot River-Keep Cool Creek 1824-D1 06-RES M-07.00 M-08.00	01-STO	2.4330
Blackfoot River-Keep Cool Creek 1824-E1 06-RES 06-RES 06-RES	06-RES	0.4363
Blackfoot River-Keep Cool Creek 1824-F1 06-RES 06-RES 06-RES	06-RES	1.6571
Blackfoot River-Keep Cool Creek 1824-F1 06-RES 06-RES 06-RES	06-RES	0.0867
Blackfoot River-Keep Cool Creek 1824-G1 06-RES 06-RES 06-RES	いいったころ	
Blackfoot River-Keep Cool Creek 1824-G1 NO-ROW NO-ROW NO-ROW	ODENLHWY LEGAL	0.1457
	OPEN-HWY LEGAL	0.1457
Blackfoot River-Keep Cool Creek 1824-H1 06-RES 06-RES 06-RES	OPEN-HWY LEGAL NO-ROW 06-RES	0.1457 0.5823 1.1981

HUC5 NAME	ID	ALT_1	ALT_2	ALT_3	ALT_4	Miles
Blackfoot River-Keep Cool Creek	1824-I1	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	0.4945
Blackfoot River-Keep Cool Creek	1824-NEW	P-ALT4	P-ALT4	P-ALT4	ROAD RECONSTRUCTION	0.0603
Blackfoot River-Keep Cool Creek	1825-A1	06-RES	CDNST	CDNST	CDNST	0.0026
Blackfoot River-Keep Cool Creek	1825-A1	06-RES	CDNST	CDNST	CDNST	0.7083
Blackfoot River-Keep Cool Creek	1825-B1	OPEN-HWY LEGAL	OPEN-HWY LEGAL	DECOM	DECOM	2.1184
Blackfoot River-Keep Cool Creek	1825-D1	01-RES	01-RES-STO	01-RES-STO	01-RES-STO	0.2668
Blackfoot River-Keep Cool Creek	1825-E1	06-RES	06-RES	DECOM	DECOM	0.4905
Blackfoot River-Keep Cool Creek	1825-F1	06-RES	06-RES	06-RES	06-RES	0.2118
Blackfoot River-Keep Cool Creek	1826-B1	01-RES	01-RES-STO	DECOM	DECOM	1.2517
Blackfoot River-Keep Cool Creek	1826-B2	01-RES	01-RES-STO	DECOM	DECOM	0.3050
Blackfoot River-Keep Cool Creek	1826-B3	01-RES	01-RES-STO	DECOM	DECOM	0.1426
Blackfoot River-Keep Cool Creek	1826-G1	01-RES	01-RES	DECOM	DECOM	0.1351
HUC5 NAME	ID	ALT_1	ALT_2	ALT_3	ALT_4	Miles
Blackfoot River-Keep Cool Creek	1826-H1	01-RES	01-RES-STO	DECOM	DECOM	0 7225
Blackfoot River-Keep Cool Creek	1826-I1	01-RES	01-RES-STO	DECOM	DECOM	0.797
Blackfoot River-Keep Cool Creek	1826-J1	01-RES	01-RES-STO	DECOM	DECOM	2.147
Blackfoot River-Keep Cool Creek	1826-K1	01-RES	01-RES	DECOM	DECOM	1.7350
Blackfoot River-Keep Cool Creek	1829-A1	09-RES	09-RES	11-RES	09-RES	1.141
Blackfoot River-Keep Cool Creek	1834-001	01-RES	01-RES	01-RES	01-RES	0.0310
Blackfoot River-Keep Cool Creek	1834-001	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.075
Blackfoot River-Keep Cool Creek	1834-C1	OPEN-HWY LEGAL	01-STO	01-STO	DECOM	0.005
Blackfoot River-Keep Cool Creek	1837-A1	06-RES	06-RES	06-RES	06-RES	0.543
Blackfoot River-Keep Cool Creek	1837-B1	06-RES	06-RES	06-RES	06-RES	1.9817
Blackfoot River-Keep Cool Creek	1837-B2	06-RES	06-RES	06-RES	06-RES	0.5569
Blackfoot River-Keep Cool Creek	1837-B3	06-RES	06-RES	06-RES	06-RES	0.8680
Blackfoot River-Keep Cool Creek	1837-B4	06-RES	06-RES	06-RES	06-RES	0.222
Blackfoot River-Keep Cool Creek	1837-B5	06-RES	06-RES	06-RES	06-RES	0.138
Blackfoot River-Keep Cool Creek	1838-001	UC-OPEN	OPEN-HWY LEGAL	DECOM	DECOM	0.103
Blackfoot River-Keep Cool Creek	1838-A1	10-RES	10-RES	DECOM	12-RES	2.032
Blackfoot River-Keep Cool Creek	1838-A2	10-RES	10-RES	DECOM	DECOM	0.932
Blackfoot River-Keep Cool Creek	1838-A3	10-RES	10-RES	DECOM	DECOM	2.086
Blackfoot River-Keep Cool Creek	1838-B1	10-RES	10-RES	DECOM	DECOM	0.312
Blackfoot River-Keep Cool Creek	1838-C1	10-RES	01-STO	DECOM	DECOM	1.031
Blackfoot River-Keep Cool Creek	1838-C3	DC	DC	DC	DC	0.392
Blackfoot River-Keep Cool Creek	1838-C4	DC	DC	DC	DC	0.714
Blackfoot River-Keep Cool Creek	1838-C6	DC	DC	DC	DC	0.340
Blackfoot River-Keep Cool Creek	1838-D1	10-RES	10-RES	DECOM	DECOM	1.028
Blackfoot River-Keep Cool Creek	1838-D2	10-RES	10-RES	DECOM	DECOM	1.116

HUC5 NAME	ID	ALT_1	ALT_2	ALT_3	ALT_4	Miles
Blackfoot River-Keep Cool Creek	1838-E1	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	1.0073
Blackfoot River-Keep Cool Creek	1838-E2	10-RES	10-RES	DECOM	DECOM	0.2515
Blackfoot River-Keep Cool Creek	1838-F1	10-RES	01-STO	DECOM	DECOM	0.2170
Blackfoot River-Keep Cool Creek	1842-A1	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	01-STO	1.0096
Blackfoot River-Keep Cool Creek	1842-A2	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	DECOM	0.4678
Blackfoot River-Keep Cool Creek	1842-B1	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	01-STO	0.4359
Blackfoot River-Keep Cool Creek	1842-B2	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	01-STO	1.7456
Blackfoot River-Keep Cool Creek	1842-B3	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	DECOM	0.2196
Blackfoot River-Keep Cool Creek	1842-C1	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.4013
Blackfoot River-Keep Cool Creek	1842-D1	DC	DC	DC	DC	0.4393
Blackfoot River-Keep Cool Creek	1842-E1	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	DECOM	0.2759
Blackfoot River-Keep Cool Creek	1843-A1	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	01-STO	0.5803
Blackfoot River-Keep Cool Creek	1881-A1	06-RES	06-RES	06-RES	06-RES	2.1120
Blackfoot River-Keep Cool Creek	1881-A2	01-RES	01-RES	01-RES	06-RES	0.4839
Blackfoot River-Keep Cool Creek	1881-E1	06-RES	06-RES	06-RES	06-RES	0.0321
Blackfoot River-Keep Cool Creek	1881-E2	06-RES	06-RES	06-RES	06-RES	0.3234
Blackfoot River-Keep Cool Creek	1881-H1	01-RES	01-RES	01-RES	06-RES	0.3998
Blackfoot River-Keep Cool Creek	1884-D1	OPEN-HWY LEGAL	CDNST	CDNST	CDNST	0.0080
Blackfoot River-Keep Cool Creek	1884-D1	OPEN-HWY LEGAL	CDNST	CDNST	CDNST	0.0093
Blackfoot River-Keep Cool Creek	1884-D1	OPEN-HWY LEGAL	CDNST	CDNST	CDNST	0.3957
Blackfoot River-Keep Cool Creek	1884-D1	OPEN-HWY LEGAL	CDNST	CDNST	CDNST	1.0231
Blackfoot River-Keep Cool Creek	1892-A1	09-RES	01-STO	01-STO	01-STO	0.4222
Blackfoot River-Keep Cool Creek	1892-B1	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	0.8592
Blackfoot River-Keep Cool Creek	1892-C1	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.2730
Blackfoot River-Keep Cool Creek	1892-C1	09-RES	09-RES	11-RES	09-RES	4.1056
Blackfoot River-Keep Cool Creek	1892-C2	09-RES	01-STO	01-STO	01-STO	0.5504
Blackfoot River-Keep Cool Creek	1892-C3	09-RES	09-RES	11-RES	09-RES	1.8579
HUC5 NAME	ID	ALT_1	ALT_2	ALT_3	ALT_4	Miles

HUC5 NAME	ID	ALT_1	ALT_2	ALT_3	ALT_4	Miles
Blackfoot River-Keen Cool Creek	1892-D1	OPFN-HWY I FGAI	01-RFS	01-RFS	06-RFS	0.5166
Blackfoot River-Keep Cool Creek	1892-D3	OPEN-HWY LEGAL	01-RES	01-RES	DECOM	0.4152
Blackfoot River-Keep Cool Creek	1892-D3	OPEN-HWY LEGAL	01-RES	01-RES	NM	0.5720
Blackfoot River-Keep Cool Creek	1892-D4	OPEN-HWY LEGAL	01-STO	01-STO	DECOM	0.3996
Blackfoot River-Keep Cool Creek	1892-F1	06-RES	06-RES	06-RES	06-RES	1.4004
Blackfoot River-Keep Cool Creek	1892-G1	06-RES	06-RES	06-RES	06-RES	0.8144
Blackfoot River-Keep Cool Creek	1892-H1	OPEN-HWY LEGAL	01-STO	01-STO	OPEN-HWY LEGAL	0.4285
Blackfoot River-Keep Cool Creek	1892-J1	06-RES	06-RES	06-RES	06-RES	1.3791
Blackfoot River-Keep Cool Creek	1893-A1	06-RES	06-RES	06-RES	06-RES	0.6421
Blackfoot River-Keep Cool Creek	1893-B1	06-RES	06-RES	06-RES	06-RES	2.1916
Blackfoot River-Keep Cool Creek	1893-C1	06-RES	06-RES	06-RES	06-RES	0.4000

HUC5 NAME	ID	ALT_1	ALT_2	ALT_3	ALT_4	Miles
Blackfoot River-Keep Cool Creek	1893-C1	06-RES	06-RES	06-RES	06-RES	0.4484
Blackfoot River-Keep Cool Creek	329-B1	OPEN-HWY LEGAL	01-STO	DECOM	DECOM	0.1637
Blackfoot River-Keep Cool Creek	329-B1	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.2442
Blackfoot River-Keep Cool Creek	329-C1	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	1.1664
Blackfoot River-Keep Cool Creek	329-C2	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.0687
Blackfoot River-Keep Cool Creek	329-D1	09-RES	09-RES	11-RES	09-RES	1.1259
Blackfoot River-Keep Cool Creek	329-E1	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	1.7164
Blackfoot River-Keep Cool Creek	329-G1	09-RES	09-RES	11-RES	DECOM	0.2322
Blackfoot River-Keep Cool Creek	329-G1	09-RES	09-RES	11-RES	09-RES	1.6830
Blackfoot River-Keep Cool Creek	329-G2	09-RES	01-STO	DECOM	DECOM	0.2268
Blackfoot River-Keep Cool Creek	329-H1	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.0528
Blackfoot River-Keep Cool Creek	329-I1	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.0460
Blackfoot River-Keep Cool Creek	329-J1	OPEN-HWY LEGAL	NM	NM	NM	0.0522
Blackfoot River-Keep Cool Creek	329-J1	OPEN-HWY LEGAL	NM	NM	OPEN-HWY LEGAL	0.1229
Blackfoot River-Keep Cool Creek	329-J2	NATURAL	NATURAL RECLAIMED	DECOM	DECOM	0.4539
Blackfoot River-Keep Cool Creek	329-L1	01-RES	01-RES	01-RES	OPEN-HWY LEGAL	0.1055
Blackfoot River-Keep Cool Creek	329-L2	01-RES	01-RES	01-RES	OPEN-HWY LEGAL	0.0806
Blackfoot River-Keep Cool Creek	329-M1	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	0.8995
Blackfoot River-Keep Cool Creek	4043-B1	12-RES	12-RES	12-RES	09-RES	0.8370
Blackfoot River-Keep Cool Creek	4043-C1	12-RES	01-STO	01-STO	01-STO	0.9280
Blackfoot River-Keep Cool Creek	4043-D1	12-RES	01-STO	01-STO	01-STO	1.1660
Blackfoot River-Keep Cool Creek	4043-E1	12-RES	01-STO	01-STO	01-STO	0.7742
Blackfoot River-Keep Cool Creek	4043-F1	12-RES	12-RES	M-08.00	M-08.105	0.1650
Blackfoot River-Keep Cool Creek	4043-F1	12-RES	M-07.00	M-08.00	M-08.105	0.6028
Blackfoot River-Keep Cool Creek	4043-G1	12-RES	01-STO	01-STO	01-STO	0.8924
Blackfoot River-Keep Cool Creek	4043-G2	12-RES	01-STO	01-STO	01-STO	0.0750
Blackfoot River-Keep Cool Creek	4050-A1	DC	DC	DC	DC	0.0423
Blackfoot River-Keep Cool Creek	4050-A2	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	0.4722
Blackfoot River-Keep Cool Creek	4106-001	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.2690
Blackfoot River-Keep Cool Creek	4106-002	UC-M-07.00	M-07.00	M-08.00	M-08.105	0.7550
Blackfoot River-Keep Cool Creek	4106-003	UC-CLOSED	01-RES	DECOM	DECOM	0.4557
Blackfoot River-Keep Cool Creek	4106-004	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.0758
Blackfoot River-Keep Cool Creek	4106-A1	NATURAL	NATURAL RECLAIMED	DECOM	DECOM	1.1071
Blackfoot River-Keep Cool Creek	4106-B1	06-RES	06-RES	06-RES	06-RES	0.5412
Blackfoot River-Keep Cool Creek	4106-C1	06-RES	06-RES	06-RES	06-RES	1.0381
Blackfoot River-Keep Cool Creek	4106-D1	06-RES	06-RES	06-RES	06-RES	0.7000
Blackfoot River-Keep Cool Creek	4106-D1	06-RES	06-RES	06-RES	06-RES	0.8804
Blackfoot River-Keep Cool Creek	4106-E1	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.0004
Blackfoot River-Keep Cool Creek	4106-E1	01-RES	01-RES-STO	01-RES-STO	01-RES-STO	0.1767
Blackfoot River-Keep Cool Creek	4106-E1	01-RES	NM	NM	01-RES-STO	0.5688
Blackfoot River-Keep Cool Creek	4106-H1 4106-H2	01-RES	01-RES-STO	01-RES-STO	01-RES-STO	0.3000

HUC5 NAME	ID	ALT_1	ALT_2	ALT_3	ALT_4	Miles
Blackfoot River-Keep Cool Creek	4106-H3	01-RES	NM	NM	01-RES-STO	0.3784
HUC5 NAME	ID	ALT_1	ALT_2	ALT_3	ALT_4	Miles
Blackfoot River-Keep Cool Creek	4106-K1	06-RES	06-RES	06-RES	06-RES	0.2839
Blackfoot River-Keep Cool Creek	4106-L1	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.1597
Blackfoot River-Keep Cool Creek	4106-M1	OPEN-HWY LEGAL	OPEN-HWY LEGAL	DECOM	DECOM	0.4429
Blackfoot River-Keep Cool Creek	4133-A1	OPEN-HWY LEGAL	OPEN-HWY LEGAL	01-RES	01-STO	0.1568
Blackfoot River-Keep Cool Creek	4134-A1	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.3643
Blackfoot River-Keep Cool Creek	4134-B1	OPEN-HWY LEGAL	01-STO	01-STO	DECOM	0.3435
Blackfoot River-Keep Cool Creek	4134-B2	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	DECOM	0.1199
Blackfoot River-Keep Cool Creek	4135-B1	09-RES	01-STO	DECOM	DECOM	0.3560
Blackfoot River-Keep Cool Creek	417-NEW-1	P-ALT4	P-ALT4	P-ALT4	MT RECONSTRUCTION	0.2304
Blackfoot River-Keep Cool Creek	417-NEW-2	P-ALT4	P-ALT4	P-ALT4	MT RECONSTRUCTION	0.3198
Blackfoot River-Keep Cool Creek	417-NEW-3	P-ALT4	P-ALT4	P-ALT4	MT RECONSTRUCTION	0.0664
Blackfoot River-Keep Cool Creek	417-NEW-4	P-ALT4	P-ALT4	P-ALT4	MT RECONSTRUCTION	0.5990
Blackfoot River-Keep Cool Creek	417-NEW-5	P-ALT4	P-ALT4	P-ALT4	MT RECONSTRUCTION	1.2806
Blackfoot River-Keep Cool Creek	440-NEW-1	P-ALT4	P-ALT4	P-ALT4	NM RECONSTRUCTION	0.1508
Blackfoot River-Keep Cool Creek	440-NEW-2	P-ALT4	P-ALT4	P-ALT4	NM RECONSTRUCTION	0.0352
Blackfoot River-Keep Cool Creek	467-NEW-2	P-ALT4	P-ALT4	P-ALT4	MT RECONSTRUCTION	0.1154
Blackfoot River-Keep Cool Creek	467-NEW-3	P-ALT4	P-ALT4	P-ALT4	MT RECONSTRUCTION	0.0278
Blackfoot River-Keep Cool Creek	467-NEW-4	P-ALT4	P-ALT4	P-ALT4	MT RECONSTRUCTION	0.8557
Blackfoot River-Keep Cool Creek	467-NEW-5	P-ALT4	P-ALT4	P-ALT4	MT RECONSTRUCTION	0.0041
Blackfoot River-Keep Cool Creek	467-NEW-8	P-ALT4	P-ALT4	P-ALT4	MT RECONSTRUCTION	0.0072
Blackfoot River-Keep Cool Creek	485-A1	DC	DC	DC	DC	2.3862
Blackfoot River-Keep Cool Creek	485-B1	09-RES	09-RES	11-RES	09-RES	2.1483
Blackfoot River-Keep Cool Creek	485-B2	DC	DC	DC	DC	0.6305
Blackfoot River-Keep Cool Creek	485-C1	09-RES	01-STO	01-STO	DECOM	0.6714
Blackfoot River-Keep Cool Creek	485-C2	09-RES	01-STO	01-STO	DECOM	0.4591
Blackfoot River-Keep Cool Creek	485-D1	OPEN-HWY LEGAL	CDNST	CDNST	CDNST	0.0045
Blackfoot River-Keep Cool Creek	485-D1	OPEN-HWY LEGAL	CDNST	CDNST	CDNST	0.0125
Blackfoot River-Keep Cool Creek	485-H1	09-RES	01-STO	01-STO	01-STO	0.3740
Blackfoot River-Keep Cool Creek	485-H3	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.0694
Blackfoot River-Keep Cool Creek	485-H3	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.0034
Blackfoot River-Keep Cool Creek	485-H3	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.7120
Blackfoot River-Keep Cool Creek	485-H4	09-RES	01-STO	01-STO	01-STO	0.5880
Blackfoot River-Keep Cool Creek	485-H5	09-RES	01-STO	01-STO	01-STO	0.3923
Blackfoot River-Keep Cool Creek	485-J1	09-RES	01-STO	01-STO	01-STO	0.3420
Blackfoot River-Keep Cool Creek	601-001	UC-OPEN	OPEN-HWY LEGAL	DECOM	DECOM	0.3420
Blackfoot River-Keep Cool Creek	601-001	UC-OPEN	OPEN-HWY LEGAL	DECOM	M-07.00	0.1074
Blackfoot River-Keep Cool Creek	601-001	UC-OPEN	OPEN-HWY LEGAL	DECOM	M-07.00	0.8107

HUC5 NAME	ID	ALT_1	ALT_2	ALT_3	ALT_4	Miles
Blackfoot River-Keep Cool Creek	601-A1	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.2981
Blackfoot River-Keep Cool Creek	601-A2	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.3181
Blackfoot River-Keep Cool Creek	601-B1	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.1525
Blackfoot River-Keep Cool Creek	601-D1	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.8069
Blackfoot River-Keep Cool Creek	601-E1	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.2685
Blackfoot River-Keep Cool Creek	601-E1	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	1.7750
Blackfoot River-Keep Cool Creek	601-F1	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	0.2575
Blackfoot River-Keep Cool Creek	601-G1	NATURAL	NATURAL RECLAIMED	DECOM	DECOM	0.1461
Blackfoot River-Keep Cool Creek	601-H2	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.0803
Blackfoot River-Keep Cool Creek	601-J1	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.2277
Blackfoot River-Keep Cool Creek	601-K1	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	0.2094
Blackfoot River-Keep Cool Creek	601-K2	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	1.0756
Blackfoot River-Keep Cool Creek	601-K3	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	0.2716
Blackfoot River-Keep Cool Creek	601-K4	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	0.4966
Blackfoot River-Keep Cool Creek	601-P1	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.2017
Blackfoot River-Keep Cool Creek	607-A1	01-RES	01-RES-STO	01-RES-STO	01-RES-STO	1.3553
HUC5 NAME	ID	ALT_1	ALT_2	ALT_3	ALT_4	Miles
Blackfoot River-Keen Cool Creek	607-C1	01-RFS	01-RFS-STO	01-RFS-STO	01-RFS-STO	0 0764
Blackfoot River-Keep Cool Creek	607-C1	01-RES	NM	NM	NM	1.2083
Blackfoot River-Keep Cool Creek	607-C2	01-RES	01-RES-STO	01-RES-STO	01-RES-STO	0.1021
	607-D1	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.3004
Blackfoot River-Keep Cool Creek	1U-100					
Blackfoot River-Keep Cool Creek Blackfoot River-Keep Cool Creek	607-D1	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	0.4949
	*** - *			01-STO OPEN-HWY LEGAL	01-STO OPEN-HWY LEGAL	0.4949 0.0393
Blackfoot River-Keep Cool Creek	607-D1	OPEN-HWY LEGAL	01-STO			
Blackfoot River-Keep Cool Creek Blackfoot River-Keep Cool Creek	607-D1 607-D2	OPEN-HWY LEGAL OPEN-HWY LEGAL	01-STO OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.0393
Blackfoot River-Keep Cool Creek Blackfoot River-Keep Cool Creek Blackfoot River-Keep Cool Creek	607-D1 607-D2 607-E1	OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL	01-STO OPEN-HWY LEGAL OPEN-HWY LEGAL	OPEN-HWY LEGAL OPEN-HWY LEGAL	OPEN-HWY LEGAL OPEN-HWY LEGAL	0.0393 0.7791
Blackfoot River-Keep Cool Creek Blackfoot River-Keep Cool Creek Blackfoot River-Keep Cool Creek Blackfoot River-Keep Cool Creek	607-D1 607-D2 607-E1 607-F1	OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL	01-STO OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL	OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL	OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL	0.0393 0.7791 1.5124
Blackfoot River-Keep Cool Creek Blackfoot River-Keep Cool Creek Blackfoot River-Keep Cool Creek Blackfoot River-Keep Cool Creek Blackfoot River-Keep Cool Creek	607-D1 607-D2 607-E1 607-F1 607-F2	OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL 01-RES	01-STO OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL 01-RES-STO	OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL 01-RES-STO	OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL 01-RES-STO	0.0393 0.7791 1.5124 0.1240
Blackfoot River-Keep Cool Creek	607-D1 607-D2 607-E1 607-F1 607-F2 607-F2	OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL 01-RES 01-RES	01-STO OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL 01-RES-STO 01-RES-STO	OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL 01-RES-STO 01-RES-STO	OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL 01-RES-STO 01-RES-STO	0.0393 0.7791 1.5124 0.1240 1.0004
Blackfoot River-Keep Cool Creek Blackfoot River-Keep Cool Creek	607-D1 607-D2 607-E1 607-F1 607-F2 607-F2 607-G1	OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL 01-RES 01-RES 01-RES	01-STO OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL 01-RES-STO 01-RES-STO 01-RES-STO	OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL 01-RES-STO 01-RES-STO 01-RES-STO	OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL 01-RES-STO 01-RES-STO 01-RES-STO	0.0393 0.7791 1.5124 0.1240 1.0004 0.4054
Blackfoot River-Keep Cool Creek	607-D1 607-D2 607-E1 607-F1 607-F2 607-F2 607-G1 607-H1	OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL 01-RES 01-RES 01-RES OPEN-HWY LEGAL	01-STO OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL 01-RES-STO 01-RES-STO 01-RES-STO OPEN-HWY LEGAL	OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL 01-RES-STO 01-RES-STO 01-RES-STO OPEN-HWY LEGAL	OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL 01-RES-STO 01-RES-STO 01-RES-STO OPEN-HWY LEGAL	0.0393 0.7791 1.5124 0.1240 1.0004 0.4054 0.2615
Blackfoot River-Keep Cool Creek	607-D1 607-D2 607-E1 607-F1 607-F2 607-F2 607-G1 607-H1	OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL 01-RES 01-RES 01-RES OPEN-HWY LEGAL OPEN-HWY LEGAL	01-STO OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL 01-RES-STO 01-RES-STO 01-RES-STO OPEN-HWY LEGAL OPEN-HWY LEGAL	OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL 01-RES-STO 01-RES-STO 01-RES-STO OPEN-HWY LEGAL OPEN-HWY LEGAL	OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL 01-RES-STO 01-RES-STO 01-RES-STO OPEN-HWY LEGAL OPEN-HWY LEGAL	0.0393 0.7791 1.5124 0.1240 1.0004 0.4054 0.2615 0.3410
Blackfoot River-Keep Cool Creek	607-D1 607-D2 607-E1 607-F1 607-F2 607-G1 607-H1 607-H1	OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL O1-RES 01-RES 01-RES OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL	01-STO OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL 01-RES-STO 01-RES-STO 01-RES-STO OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL	OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL 01-RES-STO 01-RES-STO 01-RES-STO OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL	OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL 01-RES-STO 01-RES-STO 01-RES-STO OPEN-HWY LEGAL OPEN-HWY LEGAL DECOM	0.0393 0.7791 1.5124 0.1240 1.0004 0.4054 0.2615 0.3410 0.7925
Blackfoot River-Keep Cool Creek	607-D1 607-D2 607-E1 607-F1 607-F2 607-G1 607-H1 607-H1 607-H1 626-A1	OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL O1-RES 01-RES 01-RES OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL	01-STO OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL 01-RES-STO 01-RES-STO 01-RES-STO OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL	OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL 01-RES-STO 01-RES-STO 01-RES-STO OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL M-08.00	OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL 01-RES-STO 01-RES-STO 01-RES-STO OPEN-HWY LEGAL OPEN-HWY LEGAL DECOM M-08.105	0.0393 0.7791 1.5124 0.1240 1.0004 0.4054 0.2615 0.3410 0.7925 0.1530
Blackfoot River-Keep Cool Creek	607-D1 607-D2 607-E1 607-F1 607-F2 607-G1 607-H1 607-H1 607-H1 626-A1	OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL O1-RES 01-RES 01-RES OPEN-HWY LEGAL	01-STO OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL 01-RES-STO 01-RES-STO 01-RES-STO OPEN-HWY LEGAL	OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL 01-RES-STO 01-RES-STO 01-RES-STO OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL M-08.00 M-08.00	OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL 01-RES-STO 01-RES-STO 01-RES-STO OPEN-HWY LEGAL OPEN-HWY LEGAL DECOM M-08.105 M-08.105	0.0393 0.7791 1.5124 0.1240 1.0004 0.4054 0.2615 0.3410 0.7925 0.1530 1.2218
Blackfoot River-Keep Cool Creek	607-D1 607-D2 607-E1 607-F1 607-F2 607-G1 607-H1 607-H1 607-H1 626-A1 626-B1	OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL O1-RES O1-RES O1-RES OPEN-HWY LEGAL	01-STO OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL 01-RES-STO 01-RES-STO 01-RES-STO OPEN-HWY LEGAL	OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL 01-RES-STO 01-RES-STO 01-RES-STO OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL M-08.00 M-08.00 M-08.00	OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL 01-RES-STO 01-RES-STO 01-RES-STO OPEN-HWY LEGAL OPEN-HWY LEGAL DECOM M-08.105 M-08.105 M-08.105	0.0393 0.7791 1.5124 0.1240 1.0004 0.4054 0.2615 0.3410 0.7925 0.1530 1.2218 0.9236 0.2474
Blackfoot River-Keep Cool Creek	607-D1 607-D2 607-E1 607-F1 607-F2 607-G1 607-H1 607-H1 626-A1 626-A1 626-B1 626-C1	OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL O1-RES O1-RES O1-RES OPEN-HWY LEGAL	01-STO OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL 01-RES-STO 01-RES-STO 01-RES-STO OPEN-HWY LEGAL	OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL 01-RES-STO 01-RES-STO 01-RES-STO OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL M-08.00 M-08.00 M-08.00 M-08.00 M-08.00	OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL 01-RES-STO 01-RES-STO 01-RES-STO OPEN-HWY LEGAL OPEN-HWY LEGAL DECOM M-08.105 M-08.105 M-08.105 M-08.105	0.0393 0.7791 1.5124 0.1240 1.0004 0.4054 0.2615 0.3410 0.7925 0.1530 1.2218
Blackfoot River-Keep Cool Creek	607-D1 607-D2 607-E1 607-F1 607-F2 607-G1 607-H1 607-H1 626-A1 626-A1 626-B1 626-C1 626-C2	OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL O1-RES O1-RES O1-RES OPEN-HWY LEGAL	01-STO OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL 01-RES-STO 01-RES-STO 01-RES-STO OPEN-HWY LEGAL	OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL 01-RES-STO 01-RES-STO 01-RES-STO OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL M-08.00 M-08.00 M-08.00 M-08.00 01-STO	OPEN-HWY LEGAL OPEN-HWY LEGAL OPEN-HWY LEGAL 01-RES-STO 01-RES-STO 01-RES-STO OPEN-HWY LEGAL OPEN-HWY LEGAL DECOM M-08.105 M-08.105 M-08.105 M-08.105 01-STO	0.0393 0.7791 1.5124 0.1240 1.0004 0.4054 0.2615 0.3410 0.7925 0.1530 1.2218 0.9236 0.2474 0.3838

HUC5 NAME	ID	ALT_1	ALT_2	ALT_3	ALT_4	Miles
Blackfoot River-Keep Cool Creek	PVT-3002	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.2769
Blackfoot River-Keep Cool Creek	PVT-3003	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.2318
Blackfoot River-Keep Cool Creek	PVT-3004	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.0840
Blackfoot River-Keep Cool Creek	PVT-3005	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.3146
Blackfoot River-Keep Cool Creek	PVT-3006	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.0869
Blackfoot River-Keep Cool Creek	PVT-3007	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.0753
Blackfoot River-Keep Cool Creek	PVT-3008	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.0498
Blackfoot River-Keep Cool Creek	PVT-3009	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.0726
Blackfoot River-Keep Cool Creek	PVT-3010	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.4291
Blackfoot River-Keep Cool Creek	PVT-3011	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.5683
Blackfoot River-Keep Cool Creek	PVT-3012	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.5807
Blackfoot River-Keep Cool Creek	PVT-403	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.4168
Blackfoot River-Keep Cool Creek	PVT-404	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.4108
Blackfoot River-Keep Cool Creek	PVT-405	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1466
Blackfoot River-Keep Cool Creek	PVT-406	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1983
Blackfoot River-Keep Cool Creek	PVT-407	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.2520
Blackfoot River-Keep Cool Creek	PVT-408	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.2220
Blackfoot River-Keep Cool Creek	PVT-409	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.2560
Blackfoot River-Keep Cool Creek	PVT-410	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1044
Blackfoot River-Keep Cool Creek	PVT-411	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1345
Blackfoot River-Keep Cool Creek	PVT-412	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.5253
Blackfoot River-Keep Cool Creek	PVT-413	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.4603
Blackfoot River-Keep Cool Creek	PVT-414	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.4342
Blackfoot River-Keep Cool Creek	PVT-415	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.2392
Blackfoot River-Keep Cool Creek	PVT-416	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.6527
Blackfoot River-Keep Cool Creek	PVT-417	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.2888
Blackfoot River-Keep Cool Creek	PVT-418	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.0433
Blackfoot River-Keep Cool Creek	PVT-424	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.0679
Blackfoot River-Keep Cool Creek	PVT-425	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.5073
Blackfoot River-Keep Cool Creek	U-066	CLOSED-LX	01-RES	01-RES	06-RES	1.6048
Blackfoot River-Keep Cool Creek	U-066	CLOSED-LX	01-STO	01-RES	06-RES	2.1727
HUC5 NAME	ID	ALT_1	ALT_2	ALT_3	ALT_4	Miles
Blackfoot River-Keep Cool Creek	U-067	CLOSED-LX	01-RES	01-RES	06-RES	2.6688
Blackfoot River-Keep Cool Creek	U-068	CLOSED-LX	01-RES	01-RES	06-RES	0.8390
Blackfoot River-Keep Cool Creek	U-069	CLOSED-LX	01-STO	01-STO	01-STO	0.2014
Blackfoot River-Keep Cool Creek	U-069	CLOSED-LX	01-RES	01-RES	06-RES	1.3817
Blackfoot River-Keep Cool Creek	U-070	CLOSED-LX	01-STO	01-STO	01-STO	0.4549
Blackfoot River-Keep Cool Creek	U-071	CLOSED-LX	01-STO	01-STO	01-STO	0.1402
Blackfoot River-Keep Cool Creek	U-072	CLOSED-LX	01-STO	01-STO	01-STO	0.1234

HUC5 NAME	ID	ALT_1	ALT_2	ALT_3	ALT_4	Miles
Blackfoot River-Keep Cool Creek	U-073	CLOSED-LX	01-STO	01-STO	01-STO	0.4514
Blackfoot River-Keep Cool Creek	U-073	CLOSED-LX	01-RES	01-RES	06-RES	0.4912
Blackfoot River-Keep Cool Creek	U-074	CLOSED-LX	01-RES	01-RES	06-RES	0.1421
Blackfoot River-Keep Cool Creek	U-075	CLOSED-LX	01-RES	01-RES	06-RES	0.3031
Blackfoot River-Keep Cool Creek	U-090	CLOSED-LX	01-RES	DECOM	DECOM	1.8523
Blackfoot River-Keep Cool Creek	U-091	CLOSED-LX	01-RES	DECOM	DECOM	0.3580
Blackfoot River-Keep Cool Creek	U-092	OPEN-LX	OPEN-HWY LEGAL	01-RES	06-RES	0.9474
Blackfoot River-Keep Cool Creek	U-093	OPEN-LX	OPEN-HWY LEGAL	01-RES	06-RES	0.1484
Blackfoot River-Keep Cool Creek	U-094	OPEN-LX	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.2628
Blackfoot River-Keep Cool Creek	U-095	OPEN-LX	OPEN-HWY LEGAL	01-RES	06-RES	0.1965
Blackfoot River-Keep Cool Creek	U-100	UC-CLOSED	01-RES	DECOM	DECOM	0.4678
Blackfoot River-Keep Cool Creek	U-103	UC-M-07.00	M-07.00	DECOM	DECOM	0.0175
Blackfoot River-Keep Cool Creek	U-103	UC-M-07.00	M-07.00	DECOM	DECOM	0.0378
Blackfoot River-Keep Cool Creek	U-103	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.6069
Blackfoot River-Keep Cool Creek	U-103	UC-M-07.00	M-07.00	DECOM	DECOM	0.6620
Blackfoot River-Keep Cool Creek	U-104	UC-OPEN	OPEN-HWY LEGAL	DECOM	DECOM	0.1160
Blackfoot River-Keep Cool Creek	U-105	UC-OPEN	OPEN-HWY LEGAL	DECOM	DECOM	0.2135
Blackfoot River-Keep Cool Creek	U-106	UC-CLOSED	01-RES	DECOM	DECOM	0.2703
Blackfoot River-Keep Cool Creek	U-111	UC-CLOSED	OPEN-HWY LEGAL	DECOM	DECOM	1.0683
Blackfoot River-Keep Cool Creek	U-112	UC-OPEN	OPEN-HWY LEGAL	DECOM	DECOM	0.1762
Blackfoot River-Keep Cool Creek	U-113	UC-OPEN	OPEN-HWY LEGAL	DECOM	DECOM	0.3082
Blackfoot River-Keep Cool Creek	U-114	UC-OPEN	OPEN-HWY LEGAL	DECOM	DECOM	0.1121
Blackfoot River-Keep Cool Creek	U-115	UC-OPEN	OPEN-HWY LEGAL	OPEN-HWY LEGAL	DECOM	0.2375
Blackfoot River-Keep Cool Creek	U-116	UC-OPEN	OPEN-HWY LEGAL	DECOM	DECOM	0.1156
Blackfoot River-Keep Cool Creek	U-117	UC-CLOSED	NM	NM	NM	0.1100
Blackfoot River-Keep Cool Creek	U-117	UC-CLOSED	NM	NM	NOMTR	0.5223
Blackfoot River-Keep Cool Creek	U-1825	UC-CLOSED	DECOM	DECOM	DECOM	2.9270
Blackfoot River-Keep Cool Creek	U-1838	UC-CLOSED	01-RES	DECOM	DECOM	2.5646
Blackfoot River-Keep Cool Creek	U-1881	UC-CLOSED	01-RES	DECOM	DECOM	1.4467
Blackfoot River-Keep Cool Creek	U-1891	UC-CLOSED	01-RES	DECOM	DECOM	0.4479
Blackfoot River-Keep Cool Creek	U-330-B1	UC-CLOSED	01-RES	DECOM	DECOM	0.5391
Blackfoot River-Keep Cool Creek	U-400	UC-OPEN	OPEN-HWY LEGAL	DECOM	DECOM	0.6089
Blackfoot River-Keep Cool Creek	U-401	UC-OPEN	OPEN-HWY LEGAL	DECOM	DECOM	0.7328
Blackfoot River-Keep Cool Creek	U-4112	UC-M-07.00	M-07.00	DECOM	DECOM	0.0175
Blackfoot River-Keep Cool Creek	U-4112	UC-M-07.00	M-07.00	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.5650
Blackfoot River-Keep Cool Creek	U-4112	UC-M-07.00	M-07.00	DECOM	DECOM	0.9914
Blackfoot River-Keep Cool Creek	U-4128	UC-M-07.00	M-07.00	NM	M-08.10	0.0476
Blackfoot River-Keep Cool Creek	U-4133A	UC-OPEN	OPEN-HWY LEGAL	DECOM	DECOM	0.0548
Blackfoot River-Keep Cool Creek	U-414	UC-CLOSED	01-RES	DECOM	DECOM	2.7446
Blackfoot River-Keep Cool Creek	U-415	UC-CLOSED	01-RES	DECOM	DECOM	0.1613
Blackfoot River-Keep Cool Creek	U-416	UC-CLOSED	01-RES	DECOM	DECOM	0.0640

HUC5 NAME	ID	ALT_1	ALT_2	ALT_3	ALT_4	Miles
Blackfoot River-Keep Cool Creek	U-416	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.2720
Blackfoot River-Keep Cool Creek	U-416	UC-CLOSED	01-RES	DECOM	DECOM	1.3521
Blackfoot River-Keep Cool Creek	U-417	UC-M-07.00	M-07.00	DECOM	DECOM	1.7658
Blackfoot River-Keep Cool Creek	U-430	UC-OPEN	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.2159
Blackfoot River-Keep Cool Creek	U-431	UC-OPEN	OPEN-HWY LEGAL	DECOM	DECOM	0.5721
HUC5 NAME	ID	ALT_1	ALT_2	ALT_3	ALT_4	Miles
Blackfoot River-Keen Cool Creek	11-432	UC-CLOSED	01-RFS	DECOM	DECOM	0.0975
Blackfoot River-Keep Cool Creek	U-433	UC-OPEN	OPEN-HWY LEGAL	DECOM	DECOM	0.2637
Blackfoot River-Keep Cool Creek	U-434	UC-OPEN	OPEN-HWY LEGAL	DECOM	DECOM	0.4105
Blackfoot River-Keep Cool Creek	U-435	UC-OPEN	OPEN-HWY LEGAL	DECOM	DECOM	0.1460
Blackfoot River-Keep Cool Creek	U-436	UC-OPEN	OPEN-HWY LEGAL	DECOM	DECOM	0.2634
Blackfoot River-Keep Cool Creek	U-441	UC-CLOSED	01-RES	DECOM	DECOM	0.1298
Blackfoot River-Keep Cool Creek	U-442	UC-CLOSED	01-RES	DECOM	DECOM	0.1169
Blackfoot River-Keep Cool Creek	U-444	UC-CLOSED	01-RES	DECOM	DECOM	0.5861
Blackfoot River-Keep Cool Creek	U-445	UC-OPEN	01-RES	DECOM	DECOM	0.1278
Blackfoot River-Keep Cool Creek	U-446	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	DECOM	0.1417
Blackfoot River-Keep Cool Creek	U-448	UC-OPEN	DECOM	DECOM	DECOM	0.3122
Blackfoot River-Keep Cool Creek	U-NEW-1892	P-ALT4	P-ALT4	P-ALT4	NM NEW CONSTRUCTION	0.4962
Blackfoot River-Keep Cool Creek	U-NEW4	P-ALT2&3	MT NEW CONSTRUCTION	MT NEW CONSTRUCTION	MT NEW CONSTRUCTION	0.8292
Blackfoot River-Keep Cool Creek	U-NEW-4043	P-ALT2&3	MT NEW CONSTRUCTION	MT NEW CONSTRUCTION	MT NEW CONSTRUCTION	0.9603
Landers Fork	200	14	14	14	14	1.1706
Landers Fork	330	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.0168
Landers Fork	330	STATE	STATE	STATE	STATE	0.6340
Landers Fork	330	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.8005
Landers Fork	330	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	1.0030
Landers Fork	330	11-RES	11-RES	11-RES	11-RES	1.2214
Landers Fork	330	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	1.3000
Landers Fork	330	STATE	STATE	STATE	STATE	1.3440
Landers Fork	330	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	3.5000
Landers Fork	330	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	5.5190
Landers Fork	417	M-07.00	M-07.00	M-08.00	M-08.10	0.0200
Landers Fork	417	M-07.00	M-07.00	M-08.00	OLD TRAIL	0.1340
Landers Fork	417	M-07.00	M-07.00	M-08.00	OLD TRAIL	0.1636
Landers Fork	417	M-07.00	M-07.00	M-08.00	M-08.10	1.7584
Landers Fork	418	M-10.00	NM	NM	NM	3.5947
Landers Fork	420	NOMTR	NOMTR	NOMTR-FS	NOMTR-FS	2.8700
Landers Fork	438	NOMTR	NOMTR	NOMTR-FS	NOMTR-FS	3.9723
Landers Fork	440	NOMTR	NOMTR	NOMTR-FS	NOMTR	1.0980
Landers Fork	477	NOMTR	NOMTR	NOMTR-FS	NOMTR-FS	2.2558

HUC5 NAME	ID	ALT_1	ALT_2	ALT_3	ALT_4	Miles
Landers Fork	481	NOMTR	NOMTR	NOMTR-FS	NOMTR-FS	1.413
Landers Fork	485	M-07.00	NM	NM	NM	1.865
Landers Fork	771	11-RES	01-STO	06-RES	06-RES	0.068
Landers Fork	771	OPEN-HWY LEGAL	01-STO	06-RES	06-RES	0.131
Landers Fork	771	11-RES	01-STO	06-RES	06-RES	0.605
Landers Fork	1800	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	1.428
Landers Fork	1832	OPEN-HWY LEGAL	OPEN-HWY LEGAL	06-RES	06-RES	1.070
Landers Fork	1832	06-RES	06-RES	06-RES	06-RES	3.054
Landers Fork	1847	06-RES	06-RES	06-RES	06-RES	1.324
Landers Fork	1881	06-RES	06-RES	06-RES	06-RES	5.538
Landers Fork	1882	01-RES	01-RES	01-RES	01-RES	0.361
Landers Fork	1882	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	1.710
Landers Fork	1883	OPEN-HWY LEGAL	OPEN-HWY LEGAL	06-RES	06-RES	0.135
Landers Fork	1883	06-RES	06-RES	06-RES	06-RES	0.503
Landers Fork	1883	06-RES	06-RES	06-RES	06-RES	3.464
Landers Fork	4131	04-RES	04-RES	04-RES	04-RES	0.525
Landers Fork	1800-B1	06-RES	06-RES	06-RES	06-RES	0.19
Landers Fork	1800-B1	06-RES	06-RES	06-RES	06-RES	0.49
Landers Fork	1832-A1	OPEN-HWY LEGAL	OPEN-HWY LEGAL	06-RES	06-RES	0.03
Landers Fork	1832-A1	06-RES	06-RES	06-RES	06-RES	2.05
HUC5 NAME	ID	ALT_1	ALT_2	ALT_3	ALT_4	Mile
						0.746
Landers Fork	1847-A1	06-RFS	06-RFS	06-RFS	06-RFS	
Landers Fork	1847-B1	06-RES	06-RES	06-RES	06-RES	0.433
Landers Fork Landers Fork	1847-B1 1881-B1	06-RES 01-RES	06-RES 01-RES	06-RES 01-RES	06-RES 01-RES	0.433 0.623
Landers Fork Landers Fork Landers Fork	1847-B1 1881-B1 1881-B1	06-RES 01-RES 06-RES	06-RES 01-RES 06-RES	06-RES 01-RES 06-RES	06-RES 01-RES 06-RES	0.433 0.623 0.818
Landers Fork Landers Fork Landers Fork Landers Fork	1847-B1 1881-B1 1881-B1 1881-B2	06-RES 01-RES 06-RES 01-RES	06-RES 01-RES 06-RES 01-RES	06-RES 01-RES 06-RES 01-RES	06-RES 01-RES 06-RES 01-RES	0.433 0.623 0.818 0.704
Landers Fork Landers Fork Landers Fork Landers Fork Landers Fork	1847-B1 1881-B1 1881-B1 1881-B2 1881-B3	06-RES 01-RES 06-RES 01-RES 01-RES	06-RES 01-RES 06-RES 01-RES 01-RES	06-RES 01-RES 06-RES 01-RES 01-RES	06-RES 01-RES 06-RES 01-RES 01-RES	0.433 0.623 0.818 0.704 0.132
Landers Fork	1847-B1 1881-B1 1881-B1 1881-B2 1881-B3 1881-C1	06-RES 01-RES 06-RES 01-RES 01-RES 06-RES	06-RES 01-RES 06-RES 01-RES 01-RES 06-RES	06-RES 01-RES 06-RES 01-RES 01-RES 06-RES	06-RES 01-RES 06-RES 01-RES 01-RES 06-RES	0.433 0.623 0.818 0.704 0.132 2.46
Landers Fork Landers Fork Landers Fork Landers Fork Landers Fork	1847-B1 1881-B1 1881-B1 1881-B2 1881-B3 1881-C1 1881-C3	06-RES 01-RES 06-RES 01-RES 01-RES 06-RES 01-RES	06-RES 01-RES 06-RES 01-RES 01-RES 06-RES 01-RES	06-RES 01-RES 06-RES 01-RES 01-RES 06-RES 01-RES	06-RES 01-RES 06-RES 01-RES 01-RES 06-RES 06-RES	0.433 0.623 0.818 0.704 0.132 2.463 0.182
Landers Fork	1847-B1 1881-B1 1881-B1 1881-B2 1881-B3 1881-C1	06-RES 01-RES 06-RES 01-RES 01-RES 06-RES	06-RES 01-RES 06-RES 01-RES 01-RES 06-RES	06-RES 01-RES 06-RES 01-RES 01-RES 06-RES	06-RES 01-RES 06-RES 01-RES 01-RES 06-RES	0.43 0.62 0.81 0.70 0.13 2.46 0.18
Landers Fork	1847-B1 1881-B1 1881-B1 1881-B2 1881-B3 1881-C1 1881-C3	06-RES 01-RES 06-RES 01-RES 01-RES 06-RES 01-RES	06-RES 01-RES 06-RES 01-RES 01-RES 06-RES 01-RES	06-RES 01-RES 06-RES 01-RES 01-RES 06-RES 01-RES	06-RES 01-RES 06-RES 01-RES 01-RES 06-RES 06-RES 06-RES	0.433 0.623 0.814 0.704 0.133 2.466 0.183 0.707 0.796
Landers Fork	1847-B1 1881-B1 1881-B1 1881-B2 1881-B3 1881-C1 1881-C3 1881-D1	06-RES 01-RES 06-RES 01-RES 01-RES 06-RES 01-RES	06-RES 01-RES 06-RES 01-RES 01-RES 06-RES 01-RES 01-RES	06-RES 01-RES 06-RES 01-RES 01-RES 06-RES 01-RES	06-RES 01-RES 06-RES 01-RES 01-RES 06-RES 06-RES 06-RES	0.433 0.623 0.818 0.704 0.132 2.466 0.182 0.707
Landers Fork	1847-B1 1881-B1 1881-B1 1881-B2 1881-B3 1881-C1 1881-C3 1881-D1 1881-E1	06-RES 01-RES 06-RES 01-RES 01-RES 06-RES 01-RES 06-RES	06-RES 01-RES 06-RES 01-RES 01-RES 06-RES 01-RES 06-RES	06-RES 01-RES 06-RES 01-RES 01-RES 06-RES 01-RES 06-RES	06-RES 01-RES 06-RES 01-RES 01-RES 06-RES 06-RES 06-RES	0.433 0.623 0.818 0.704 0.132 2.466 0.182 0.704 0.798
Landers Fork	1847-B1 1881-B1 1881-B2 1881-B3 1881-C1 1881-C3 1881-D1 1881-E1 1881-E2	06-RES 01-RES 06-RES 01-RES 01-RES 06-RES 01-RES 06-RES 06-RES	06-RES 01-RES 06-RES 01-RES 01-RES 06-RES 01-RES 06-RES 06-RES	06-RES 01-RES 06-RES 01-RES 01-RES 06-RES 01-RES 06-RES 06-RES	06-RES 01-RES 06-RES 01-RES 01-RES 06-RES 06-RES 06-RES 06-RES	0.433 0.623 0.814 0.704 0.133 2.46 0.183 0.70 0.796 0.863
Landers Fork	1847-B1 1881-B1 1881-B2 1881-B3 1881-C1 1881-C3 1881-D1 1881-E1 1881-E2 1881-F1	06-RES 01-RES 06-RES 01-RES 01-RES 06-RES 01-RES 01-RES 01-RES 06-RES 06-RES	06-RES 01-RES 06-RES 01-RES 01-RES 06-RES 01-RES 06-RES 06-RES	06-RES 01-RES 06-RES 01-RES 01-RES 06-RES 01-RES 06-RES 06-RES	06-RES 01-RES 06-RES 01-RES 01-RES 06-RES 06-RES 06-RES 06-RES 06-RES	0.43; 0.62; 0.818 0.704 0.13; 2.46; 0.70; 0.79; 0.86; 0.13;
Landers Fork	1847-B1 1881-B1 1881-B2 1881-B3 1881-C1 1881-C3 1881-D1 1881-E1 1881-E2 1881-F1	06-RES 01-RES 06-RES 01-RES 01-RES 06-RES 01-RES 01-RES 06-RES 06-RES 06-RES	06-RES 01-RES 06-RES 01-RES 01-RES 06-RES 01-RES 06-RES 06-RES 06-RES	06-RES 01-RES 06-RES 01-RES 01-RES 06-RES 01-RES 06-RES 06-RES 06-RES	06-RES 01-RES 06-RES 01-RES 01-RES 06-RES 06-RES 06-RES 06-RES 06-RES 06-RES	0.433 0.623 0.818 0.704 0.132 2.46 0.182 0.707 0.798 0.862 0.130 0.800
Landers Fork	1847-B1 1881-B1 1881-B2 1881-B3 1881-C1 1881-C3 1881-D1 1881-E1 1881-E2 1881-F1 1881-F1	06-RES 01-RES 06-RES 01-RES 01-RES 06-RES 01-RES 01-RES 06-RES 06-RES 06-RES 06-RES 06-RES 06-RES	06-RES 01-RES 06-RES 01-RES 01-RES 06-RES 01-RES 01-RES 06-RES 06-RES 06-RES 06-RES 06-RES	06-RES 01-RES 06-RES 01-RES 01-RES 06-RES 01-RES 06-RES 06-RES 06-RES 06-RES	06-RES 01-RES 06-RES 01-RES 01-RES 06-RES 06-RES 06-RES 06-RES 06-RES 06-RES 06-RES 06-RES 06-RES	0.433 0.623 0.818 0.704 0.132 2.461 0.701 0.798 0.862 0.130 0.265 0.142

Landers Fork	1883-E1 1883-F1 330-001 330-A1 330-A1 330-B1 330-B1 330-C1 330-C1 330-C2 330-C3 330-D1 330-E1	06-RES 06-RES OPEN-HWY LEGAL OPEN-HWY LEGAL 06-RES 01-RES OPEN-HWY LEGAL 06-RES OPEN-HWY LEGAL 06-RES OPEN-HWY LEGAL	06-RES 06-RES OPEN-HWY LEGAL OPEN-HWY LEGAL 06-RES 01-RES OPEN-HWY LEGAL 06-RES	06-RES 06-RES OPEN-HWY LEGAL OPEN-HWY LEGAL 06-RES 01-RES OPEN-HWY LEGAL 06-RES	06-RES 06-RES OPEN-HWY LEGAL OPEN-HWY LEGAL 06-RES 06-RES 06-RES 06-RES	0.3313 0.3549 0.0800 0.1057 2.2962 2.8320 3.9760
Landers Fork	330-001 330-A1 330-A1 330-B1 330-C1 330-C1 330-C2 330-C2 330-C3 330-D1	OPEN-HWY LEGAL OPEN-HWY LEGAL 06-RES 01-RES OPEN-HWY LEGAL 06-RES OPEN-HWY LEGAL 06-RES	OPEN-HWY LEGAL OPEN-HWY LEGAL 06-RES 01-RES OPEN-HWY LEGAL 06-RES OPEN-HWY LEGAL	OPEN-HWY LEGAL OPEN-HWY LEGAL 06-RES 01-RES OPEN-HWY LEGAL 06-RES	OPEN-HWY LEGAL OPEN-HWY LEGAL 06-RES 06-RES 06-RES	0.0800 0.1057 2.2962 2.8320 3.9760
Landers Fork	330-A1 330-A1 330-B1 330-B1 330-C1 330-C1 330-C2 330-C3 330-D1	OPEN-HWY LEGAL 06-RES 01-RES OPEN-HWY LEGAL 06-RES OPEN-HWY LEGAL 06-RES	OPEN-HWY LEGAL 06-RES 01-RES OPEN-HWY LEGAL 06-RES OPEN-HWY LEGAL	OPEN-HWY LEGAL 06-RES 01-RES OPEN-HWY LEGAL 06-RES	OPEN-HWY LEGAL 06-RES 06-RES 06-RES	0.1057 2.2962 2.8320 3.9760
Landers Fork	330-A1 330-B1 330-B1 330-C1 330-C1 330-C2 330-C3 330-D1	06-RES 01-RES OPEN-HWY LEGAL 06-RES OPEN-HWY LEGAL 06-RES	06-RES 01-RES OPEN-HWY LEGAL 06-RES OPEN-HWY LEGAL	06-RES 01-RES OPEN-HWY LEGAL 06-RES	06-RES 06-RES 06-RES	2.2962 2.8320 3.9760
Landers Fork	330-B1 330-B1 330-C1 330-C1 330-C2 330-C3 330-D1	01-RES OPEN-HWY LEGAL 06-RES OPEN-HWY LEGAL 06-RES	01-RES OPEN-HWY LEGAL 06-RES OPEN-HWY LEGAL	01-RES OPEN-HWY LEGAL 06-RES	06-RES 06-RES	2.8320 3.9760
Landers Fork	330-B1 330-C1 330-C1 330-C2 330-C3 330-D1	OPEN-HWY LEGAL 06-RES OPEN-HWY LEGAL 06-RES	OPEN-HWY LEGAL 06-RES OPEN-HWY LEGAL	OPEN-HWY LEGAL 06-RES	06-RES	3.9760
Landers Fork	330-C1 330-C1 330-C2 330-C3 330-D1	06-RES OPEN-HWY LEGAL 06-RES	06-RES OPEN-HWY LEGAL	06-RES		
Landers Fork	330-C1 330-C2 330-C3 330-D1	OPEN-HWY LEGAL 06-RES	OPEN-HWY LEGAL		06-RES	0.4040
Landers Fork	330-C2 330-C3 330-D1	06-RES			00-I/LO	0.4810
Landers Fork	330-C3 330-D1			OPEN-HWY LEGAL	OPEN-HWY LEGAL	1.1260
Landers Fork	330-D1	ODENLHWY LEGAL	06-RES	06-RES	06-RES	0.1472
Landers Fork		OF LINTINVI LLGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.3529
Landers Fork	330-E1	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.0630
Landers Fork		OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.0744
Landers Fork	330-F1	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.1265
Landers Fork	330-G1	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.0925
Landers Fork Landers Fork Landers Fork Landers Fork Landers Fork	330-H1	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.0200
Landers Fork Landers Fork Landers Fork Landers Fork	330-H1	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.4127
Landers Fork Landers Fork Landers Fork	330-H2	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.1382
Landers Fork Landers Fork	330-I1	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.2952
Landers Fork	417-NEW-2	P-ALT4	P-ALT4	P-ALT4	MT RECONSTRUCTION	0.0687
	417-NEW-3	P-ALT4	P-ALT4	P-ALT4	MT RECONSTRUCTION	0.2826
Langers Fork	417-NEW-4	P-ALT4	P-ALT4	P-ALT4	MT RECONSTRUCTION	0.2723
Landers Fork	771-A1	11-RES	11-RES	NM	NM	0.1071
Landers Fork	771-A1	11-RES	11-RES	DECOM	DECOM	0.1480
Landers Fork	771-A1	DC	DC	DC	DC	0.5540
Landers Fork	771-A1	DC	DC	DC	DC	1.0000
Landers Fork	771-A1	11-RES	11-RES	11-RES	11-RES	1.7120
Landers Fork	771-A2	11-RES	11-RES	DECOM	DECOM	0.2817
Landers Fork	771-A2	DC	DC	DC	DC	1.0025
Landers Fork	771-A3	11-RES	NM	NM	NM	0.6416
Landers Fork	771-A3	06-RES	06-RES	06-RES	06-RES	3.4781
Landers Fork	U-106	UC-CLOSED	01-RES	DECOM	DECOM	0.1563
Landers Fork	U-330-B1	UC-CLOSED	01-RES	DECOM	DECOM	1.0476
Landers Fork	U-441	UC-CLOSED	01-RES	DECOM	DECOM	0.2534
Landers Fork	U-447	UC-M-11.00	NM	NM	NM	0.2334
Landers Fork	U-771-A1	11-RES	11-RES	11-RES	11-RES	0.1019
Lanuers Fork	0-771-A1	II-RES	II-RES	II-RES	II-RES	0.1018
HUC5 NAME	ID	ALT_1	ALT_2	ALT_3	ALT_4	Miles
Landers Fork	טו					

HUC5 NAME	ID	ALT_1	ALT_2	ALT_3	ALT_4	Miles
Little Prickly Pear Creek	U-051	UC-CLOSED	01-RES	DECOM	DECOM	0.0047
Little Prickly Pear Creek	U-4089	UC-CLOSED	01-RES	DECOM	DECOM	0.2516
Lower Dearborn River	440	NM	NM	NM	NOMTR	0.0360
Lower Dearborn River	1807	15	15	15	15	2.6539
Lower Dearborn River	4089	06-RES	06-RES	DECOM	DECOM	1.0910
Lower Dearborn River	U-4089	UC-CLOSED	01-RES	DECOM	DECOM	1.1468
Lower Little Blackfoot River	440	NM	NM	NM	NOMTR	0.0545
Lower Little Blackfoot River	465	DC	DC	DC	DC	0.8192
Lower Little Blackfoot River	HIGHWAY 141	14	14	14	14	7.3275
Lower North Fork Blackfoot River	200	14	14	14	14	1.2999
Lower North Fork Blackfoot River	483	NM	NM	NOMTR-FS	NOMTR-FS	1.1383
Lower North Fork Blackfoot River	483	NM	NM	NOMTR-FS	NOMTR-FS	1.2878
Lower North Fork Blackfoot River	483	NM	NM	NOMTR-FS	NOMTR-FS	1.4074
Lower North Fork Blackfoot River	4106	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	6.4301
Lower North Fork Blackfoot River	4106-J1	01-RES	OPEN-HWY LEGAL	01-RES	06-RES	0.1342
Lower North Fork Blackfoot River	4106-J1	01-RES	01-RES-STO	DECOM	DECOM	2.2115
Lower North Fork Blackfoot River	4106-J2	01-RES	OPEN-HWY LEGAL	01-RES	06-RES	2.7965
Lower North Fork Blackfoot River	4106-J3	01-RES	01-RES-STO	DECOM	DECOM	0.4437
Lower North Fork Blackfoot River	4106-N1	NATURAL	NATURAL RECLAIMED	DECOM	DECOM	0.4323
Lower North Fork Blackfoot River	4106-O1	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.2067
Lower North Fork Blackfoot River	COOPER'S LAKE ROAD	15	15	15	15	7.8974
Lower North Fork Blackfoot River	U-060	CLOSED-LX	01-RES	DECOM	DECOM	1.6179
Lower North Fork Blackfoot River	U-061	CLOSED-LX	01-RES	DECOM	DECOM	0.3504
Lower North Fork Blackfoot River	U-062	CLOSED-LX	01-RES	DECOM	DECOM	0.3071
Lower North Fork Blackfoot River	U-063	CLOSED-LX	01-RES	DECOM	DECOM	0.0670
Lower North Fork Blackfoot River	U-064	CLOSED-LX	01-RES	DECOM	DECOM	0.3247
Lower North Fork Blackfoot River	U-065	CLOSED-LX	01-RES	DECOM	DECOM	0.5329
Lower North Fork Blackfoot River	U-089	CLOSED-LX	01-RES	DECOM	DECOM	0.4819
Lower North Fork Blackfoot River	U-107	UC-CLOSED	OPEN-HWY LEGAL	DECOM	DECOM	0.6128
Lower North Fork Blackfoot River	U-108	UC-CLOSED	01-RES	DECOM	DECOM	0.1103
Lower North Fork Blackfoot River	U-109	UC-CLOSED	01-RES	DECOM	DECOM	0.0961
Lower North Fork Blackfoot River	U-110	UC-CLOSED	01-RES	DECOM	DECOM	0.5665
Middle Fork Dearborn River	200	14	14	14	14	1.2487
Middle Fork Dearborn River	200	14	14	14	14	2.9030
Middle Fork Dearborn River	440	NOMTR	NOMTR	NOMTR-FS	NOMTR	0.0143
Middle Fork Dearborn River	440	NM	NM	NM	NOMTR	0.0166
Middle Fork Dearborn River	440	NOMTR	NOMTR	NOMTR-FS	NOMTR	0.2534
Middle Fork Dearborn River	493	NOMTR	NOMTR	NOMTR-FS	NOMTR	0.0318
Middle Fork Dearborn River	1807	15	15	15	15	1.6020
Middle Fork Dearborn River	4080-B1	01-RES	DECOM	DECOM	DECOM	0.1870
Middle Fork Dearborn River	4080-B1 4081-A1	01-RES	DECOM	DECOM	DECOM	0.1070

HUC5 NAME	ID	ALT_1	ALT_2	ALT_3	ALT_4	Miles
Middle Fork Dearborn River	4081-A1	01-RES	DECOM	DECOM	DECOM	0.1695
Nevada Creek	296	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	3.4922
Nevada Creek	296	15	15	15	15	3.5000
Nevada Creek	329	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	1.6231
Nevada Creek	329	15	15	15	15	5.1040
Nevada Creek	404	M-07.00	NM	NM	NM	2.4703
Nevada Creek	405	NOMTR	NOMTR	NOMTR	NOMTR	0.6096
Nevada Creek	405	NOMTR	NOMTR	NOMTR	NOMTR	1.5806
Nevada Creek	440	NM	NM	NM	NOMTR	2.0302
Nevada Creek	465	DC	DC	DC	DC	2.8367
Nevada Creek	466	NOMTR	NOMTR	NOMTR	NOMTR	5.0174
HUC5 NAME	ID	ALT_1	ALT_2	ALT_3	ALT_4	Miles
Nevada Creek	467	M-07.00	M-07.00	NM	M-08.10	0.0002
Nevada Creek	467	M-07.00	M-07.00	NM	M-08.10	0.0165
Nevada Creek	467	M-07.00	M-07.00	NM	M-08.10	0.0452
Nevada Creek	467	M-07.00	M-07.00	NM	M-08.10	0.0560
Nevada Creek	467	M-07.00	M-07.00	NM	M-08.10	0.0906
Nevada Creek	467	M-07.00	M-07.00	NM	OLD TRAIL	0.1994
Nevada Creek	467	M-07.00	M-07.00	NM	OLD TRAIL	0.2155
Nevada Creek	467	M-07.00	M-07.00	NM	OLD TRAIL	0.2353
Nevada Creek	467	M-07.00	M-07.00	NM	OLD TRAIL	0.2355
Nevada Creek	467	M-07.00	M-07.00	NM	OLD TRAIL	0.2520
Nevada Creek	467	M-07.00	M-07.00	NM	M-08.10	0.4007
Nevada Creek	467	M-07.00	M-07.00	NM	OLD TRAIL	0.4410
Nevada Creek	467	M-07.00	M-07.00	NM	OLD TRAIL	0.5897
Nevada Creek	467	M-07.00	M-07.00	NM	M-08.10	0.9496
Nevada Creek	467	M-07.00	M-07.00	NM	M-08.10	1.2349
Nevada Creek	467	M-07.00	M-07.00	NM	M-08.10	1.7965
Nevada Creek	487	M-10.00	M-10.00	NOMTR	DECOM	0.4320
Nevada Creek	487	NOMTR	NOMTR	NOMTR	NOMTR	2.3143
Nevada Creek	1163	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	10.9375
Nevada Creek	1808	09-RES	OPEN-HWY LEGAL	OPEN-HWY LEGAL	09-RES	1.7464
Nevada Creek	1822	09-RES	09-RES	11-RES	09-RES	3.6077
Nevada Creek	1823	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.1130
Nevada Creek	1823	09-RES	OPEN-HWY LEGAL	01-STO	01-STO	0.2720
Nevada Creek	1823	09-RES	OPEN-HWY LEGAL	OPEN-HWY LEGAL	09-RES	2.6073
Nevada Creek	1829	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.2354
Nevada Creek	1829	09-RES	09-RES	11-RES	09-RES	0.3380
Nevada Creek	1829	09-RES	09-RES	11-RES	09-RES	3.0689

HUC5 NAME	ID	ALT_1	ALT_2	ALT_3	ALT_4	Miles
Nevada Creek	1830	09-RES	09-RES	11-RES	09-RES	0.085
Nevada Creek	1830	09-RES	09-RES	11-RES	09-RES	2.115
Nevada Creek	1830	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	2.8648
Nevada Creek	1831	09-RES	09-RES	11-RES	11-RES	1.835
Nevada Creek	1831	09-RES	09-RES	11-RES	11-RES	2.061
Nevada Creek	1831	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	3.338
Nevada Creek	1833	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.160
Nevada Creek	1833	09-RES	09-RES	11-RES	09-RES	0.839
Nevada Creek	1833	09-RES	09-RES	11-RES	09-RES	0.905
Nevada Creek	1833	09-RES	01-STO	01-STO	01-STO	0.926
Nevada Creek	1833	09-RES	01-STO	01-STO	01-STO	0.946
Nevada Creek	1834	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.016
Nevada Creek	1834	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	5.792
Nevada Creek	1891	09-RES	09-RES	11-RES	09-RES	0.281
Nevada Creek	1891	DC	M-07.00	M-08.00	M-08.10	0.874
Nevada Creek	1891	09-RES	09-RES	11-RES	09-RES	0.994
Nevada Creek	4047	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	0.299
Nevada Creek	4047	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	1.591
Nevada Creek	4128	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.747
Nevada Creek	4195	OPEN-HWY LEGAL	OPEN-HWY LEGAL	DECOM	DECOM	0.003
Nevada Creek	4195	OPEN-HWY LEGAL	OPEN-HWY LEGAL	DECOM	DECOM	0.411
Nevada Creek	4195	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	1.494
Nevada Creek	4196	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	4.843
Nevada Creek	8963	09-RES	01-STO	DECOM	DECOM	2.47
Nevada Creek	1163-003	OPEN-HWY LEGAL	OPEN-HWY LEGAL	DECOM	DECOM	0.321
Nevada Creek	1163-004	OPEN-HWY LEGAL	OPEN-HWY LEGAL	DECOM	DECOM	0.447
HUC5 NAME	ID	ALT_1	ALT_2	ALT_3	ALT_4	Mile
Nevada Creek	1163-005	OPEN-HWY I EGAI	OPFN-HWY I FGAI	DECOM	DECOM	0.211
Nevada Creek	1163-C1	01-RES	09-RES	11-RES	11-RES	0.063
Nevada Creek	1163-C2	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.542
Nevada Creek	1163-C4	01-RES	01-RES-STO	01-RES-STO	01-RES-STO	0.66
Nevada Creek	1163-D1	06-RES	06-RES	06-RES	06-RES	1.569
Nevada Creek	1163-D2	06-RES	06-RES	06-RES	06-RES	0.679
Nevada Creek	1163-D3	06-RES	06-RES	06-RES	06-RES	0.214
Nevada Creek	1163-D4	06-RES	06-RES	06-RES	06-RES	0.690
Nevada Creek	1163-D5	06-RES	06-RES	06-RES	06-RES	0.31
Nevada Creek	1163-E1	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.24
Nevada Creek	1163-E1	09-RES	OPEN-HWY LEGAL	OPEN-HWY LEGAL	09-RES	1.788

HUC5 NAME	ID	ALT_1	ALT_2	ALT_3	ALT_4	Miles
Nevada Creek	1163-E2	01-RES	01-RES-STO	01-RES-STO	01-RES-STO	0.6276
Nevada Creek	1163-E3	01-RES	01-RES-STO	01-RES-STO	01-RES-STO	0.0962
Nevada Creek	1163-F1	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.7428
Nevada Creek	1163-F1	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.9100
Nevada Creek	1163-G1	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	1.7319
Nevada Creek	1163-H1	01-RES	01-RES-STO	01-RES-STO	01-RES-STO	0.9985
Nevada Creek	1163-H2	01-RES	01-RES-STO	01-RES-STO	01-RES-STO	0.5908
Nevada Creek	1163-K1	01-RES	01-RES-STO	01-RES-STO	01-RES-STO	0.8313
Nevada Creek	1163-K2	01-RES	01-RES-STO	01-RES-STO	01-RES-STO	0.0701
Nevada Creek	1163-L1	01-RES	01-RES-STO	01-RES-STO	01-RES-STO	0.6093
Nevada Creek	1808-A1	09-RES	01-STO	01-STO	01-STO	0.2544
Nevada Creek	1822-A1	09-RES	01-STO	01-STO	01-STO	0.5713
Nevada Creek	1823-A1	09-RES	01-STO	01-STO	01-STO	0.9981
Nevada Creek	1823-B1	09-RES	01-STO	01-STO	01-STO	0.1946
Nevada Creek	1823-B1	09-RES	01-STO	01-STO	DECOM	0.4190
Nevada Creek	1823-B1	09-RES	01-STO	01-STO	01-STO	0.5587
Nevada Creek	1823-B1	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.7394
Nevada Creek	1823-E1	09-RES	OPEN-HWY LEGAL	DECOM	DECOM	0.3490
Nevada Creek	1823-F1	09-RES	01-STO	DECOM	DECOM	0.5265
Nevada Creek	1823-G1	09-RES	OPEN-HWY LEGAL	DECOM	DECOM	0.6070
Nevada Creek	1823-H1	09-RES	OPEN-HWY LEGAL	01-STO	01-STO	0.1513
Nevada Creek	1823-J1	09-RES	01-RES	01-RES	DECOM	0.2290
Nevada Creek	1823-J1	09-RES	01-RES	01-RES	01-STO	0.7580
Nevada Creek	1823-K1	09-RES	01-STO	01-STO	01-STO	0.5678
Nevada Creek	1823-K2	09-RES	01-STO	01-STO	01-STO	0.1922
Nevada Creek	1823-L1	09-RES	01-STO	01-STO	01-STO	0.2250
Nevada Creek	1829-B1	09-RES	09-RES	11-RES	09-RES	0.9633
Nevada Creek	1829-B2	09-RES	09-RES	06-RES	DECOM	0.2294
Nevada Creek	1829-C1	09-RES	09-RES	11-RES	09-RES	0.3998
Nevada Creek	1829-C1	09-RES	09-RES	11-RES	09-RES	1.0002
Nevada Creek	1829-C2	09-RES	09-RES	11-RES	09-RES	0.4593
Nevada Creek	1829-C3	09-RES	09-RES	11-RES	09-RES	0.3036
Nevada Creek	1829-C4	09-RES	09-RES	11-RES	09-RES	0.5987
Nevada Creek	1830-A1	01-RES	01-RES-STO	01-RES-STO	01-RES-STO	2.4045
Nevada Creek	1830-B1	09-RES	09-RES	11-RES	09-RES	1.0045
Nevada Creek	1830-B2	01-RES	01-RES	01-RES	06-RES	0.7834
Nevada Creek	1830-C1	09-RES	09-RES	11-RES	09-RES	0.9056
Nevada Creek	1831-A1	09-RES	09-RES	11-RES	11-RES	1.2049
Nevada Creek	1831-A2	09-RES	09-RES	11-RES	11-RES	0.3222
Nevada Creek	1833-A1	02-RES	01-STO	01-STO	01-STO	0.5216
Nevada Creek	1833-B1	02-RES	01-STO	01-STO	01-STO	1.8698

HUC5 NAME	ID	ALT_1	ALT_2	ALT_3	ALT_4	Miles
Nevada Creek	1833-B2	01-RES	01-RES-STO	01-RES-STO	01-RES-STO	0.1456
HUC5 NAME	ID	ALT_1	ALT_2	ALT_3	ALT_4	Miles
Nevada Creek	1833-C1	09-RES	01-STO	01-STO	01-STO	0.5240
Nevada Creek	1833-D1	09-RES	01-STO	01-STO	01-STO	0.3040
Nevada Creek	1834-A1	01-RES	01-RES	DECOM	DECOM	0.1296
Nevada Creek	1834-B1	01-RES	01-RES	OPEN-HWY LEGAL	DECOM	0.2303
Nevada Creek	1834-C1	OPEN-HWY LEGAL	01-STO	01-STO	DECOM	0.0321
Nevada Creek	1834-C1	OPEN-HWY LEGAL	01-STO	01-STO	DECOM	0.1091
Nevada Creek	1834-C1	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1440
Nevada Creek	1834-D1	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.7473
Nevada Creek	1891-A1	09-RES	01-STO	01-STO	01-STO	0.5673
Nevada Creek	1891-B1	09-RES	09-RES	11-RES	09-RES	0.4902
Nevada Creek	1892-J1	06-RES	06-RES	06-RES	06-RES	0.3983
Nevada Creek	1892-J1	06-RES	06-RES	06-RES	06-RES	0.6929
Nevada Creek	296-001	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.5332
Nevada Creek	296-A1	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	1.0403
Nevada Creek	296-A1	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	01-STO	3.5451
Nevada Creek	296-A2	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.4310
Nevada Creek	296-A2	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	3.3906
Nevada Creek	296-A3	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	1.9849
Nevada Creek	296-B1	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.1649
Nevada Creek	329-J1	OPEN-HWY LEGAL	NM	NM	OPEN-HWY LEGAL	0.0311
Nevada Creek	329-J1	OPEN-HWY LEGAL	NM	NM	NM	0.0413
Nevada Creek	329-J1	NATURAL	NATURAL RECLAIMED	DECOM	DECOM	0.2046
Nevada Creek	329-J3	NATURAL	NATURAL RECLAIMED	DECOM	DECOM	0.1458
Nevada Creek	329-J4	NATURAL	NATURAL RECLAIMED	DECOM	DECOM	0.0653
Nevada Creek	329-K1	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.1893
Nevada Creek	329-K1	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.6735
Nevada Creek	329-K2	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.0498
Nevada Creek	329-K3	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1108
Nevada Creek	329-N1	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.2438
Nevada Creek	4047-A1	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	2.3134
Nevada Creek	4047-B1	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	0.8238
Nevada Creek	4047-B1	01-RES	01-RES-STO	01-RES-STO	01-RES-STO	0.2022
Nevada Creek	4047-C1 4047-C2	01-RES	01-RES-STO	01-RES-STO	01-RES-STO	0.3823
Nevada Creek	4047-C2 4047-D1	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	0.6425
Nevada Creek	4195-001	UC-OPEN	09-RES	11-RES	09-RES	0.3593
Nevada Creek	4195-A1	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.6233

HUC5 NAME	ID	ALT_1	ALT_2	ALT_3	ALT_4	Miles
Nevada Creek	4195-A2	01-RES	01-RES	DECOM	DECOM	0.1392
Nevada Creek	4195-A3	OPEN-HWY LEGAL	OPEN-HWY LEGAL	01-STO	01-STO	0.5348
Nevada Creek	467-NEW-1	P-ALT4	P-ALT4	P-ALT4	MT RECONSTRUCTION	0.3720
Nevada Creek	467-NEW-2	P-ALT4	P-ALT4	P-ALT4	MT RECONSTRUCTION	0.9684
Nevada Creek	467-NEW-3	P-ALT4	P-ALT4	P-ALT4	MT RECONSTRUCTION	0.9498
Nevada Creek	467-NEW-5	P-ALT4	P-ALT4	P-ALT4	MT RECONSTRUCTION	0.2877
Nevada Creek	467-NEW-6	P-ALT4	P-ALT4	P-ALT4	MT RECONSTRUCTION	0.7015
Nevada Creek	467-NEW-7	P-ALT4	P-ALT4	P-ALT4	MT RECONSTRUCTION	0.2257
Nevada Creek	467-NEW-8	P-ALT4	P-ALT4	P-ALT4	MT RECONSTRUCTION	0.8918
Nevada Creek	8963-A1	01-RES	01-RES-STO	DECOM	DECOM	0.3133
Nevada Creek	8964-A1	01-RES	01-RES-STO	DECOM	DECOM	0.2515
Nevada Creek	HIGHWAY 141	14	14	14	14	23.178
Nevada Creek	PVT-1411	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1317
Nevada Creek	PVT-401	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1994
Nevada Creek	PVT-402	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.397
Nevada Creek	U-1829	UC-OPEN	OPEN-HWY LEGAL	OPEN-HWY LEGAL	09-RES	0.3396
Nevada Creek	U-1891	UC-CLOSED	01-RES	DECOM	DECOM	1.2028

HUC5 NAME	ID	ALT_1	ALT_2	ALT_3	ALT_4	Miles
Nevada Creek	U-4128	UC-M-07.00	M-07.00	NM	M-08.10	0.3372
Nevada Creek	U-8963	UC-CLOSED	01-RES	DECOM	DECOM	0.2052
Upper Little Prickley Pear Creek	279	14	14	14	14	1.3535
Upper Little Prickley Pear Creek	279	14	14	14	14	19.7840
Upper Little Prickley Pear Creek	440	ROAD-OPEN	M-07.00	NM	OLD TRAIL	0.0001
Upper Little Prickley Pear Creek	440	NM	NM	NM	NOMTR	0.0013
Upper Little Prickley Pear Creek	440	ROAD-OPEN	M-10.00	NM	NOMTR	0.0018
Upper Little Prickley Pear Creek	440	ROAD-OPEN	M-07.00	M-08.00	OPEN-HWY LEGAL	0.0027
Upper Little Prickley Pear Creek	440	ROAD-OPEN	ROAD-OPEN	ROAD-OPEN	ROAD-OPEN	0.0030
Upper Little Prickley Pear Creek	440	ROAD-OPEN	ROAD-OPEN	ROAD-OPEN	ROAD-OPEN	0.0053
Upper Little Prickley Pear Creek	440	ROAD-OPEN	ROAD-OPEN	ROAD-OPEN	ROAD-OPEN	0.0084
Upper Little Prickley Pear Creek	440	ROAD-OPEN	ROAD-OPEN	ROAD-OPEN	ROAD-OPEN	0.0096
Upper Little Prickley Pear Creek	440	ROAD-OPEN	ROAD-OPEN	ROAD-OPEN	ROAD-OPEN	0.0143
Upper Little Prickley Pear Creek	440	ROAD-OPEN	M-10.00	NM	NOMTR	0.0234
Upper Little Prickley Pear Creek	440	ROAD-OPEN	ROAD-OPEN	ROAD-OPEN	ROAD-OPEN	0.0467
Upper Little Prickley Pear Creek	440	ROAD-OPEN	M-07.00	NM	NM	0.0566
Upper Little Prickley Pear Creek	440	ROAD-OPEN	M-10.00	NM	NOMTR	0.0764
Upper Little Prickley Pear Creek	440	M-07.00	M-07.00	NM	OLD TRAIL	0.0868
Upper Little Prickley Pear Creek	440	ROAD-OPEN	M-07.00	NM	NOMTR	0.0970
Upper Little Prickley Pear Creek	440	ROAD-OPEN	M-07.00	NM	NOMTR	0.0979

HUC5 NAME	ID	ALT_1	ALT_2	ALT_3	ALT_4	Miles
Upper Little Prickley Pear Creek	440	ROAD-OPEN	M-10.00	NM	NOMTR	0.1069
Upper Little Prickley Pear Creek	440	M-10.00	M-10.00	NM	NOMTR	0.1250
Upper Little Prickley Pear Creek	440	ROAD-OPEN	ROAD-OPEN	NM	OLD TRAIL	0.1379
Upper Little Prickley Pear Creek	440	ROAD-OPEN	M-07.00	M-08.00	OPEN-HWY LEGAL	0.1711
Upper Little Prickley Pear Creek	440	ROAD-OPEN	M-07.00	M-08.00	OPEN-HWY LEGAL	0.1726
Upper Little Prickley Pear Creek	440	ROAD-OPEN	M-07.00	NM	OLD TRAIL	0.2388
Upper Little Prickley Pear Creek	440	ROAD-OPEN	M-07.00	M-08.00	M-08.10	0.2812
Upper Little Prickley Pear Creek	440	M-07.00	M-07.00	NM	NM	0.2907
Upper Little Prickley Pear Creek	440	ROAD-OPEN	M-07.00	NM	NM	0.3094
Upper Little Prickley Pear Creek	440	M-07.00	M-07.00	NM	OLD TRAIL	0.5245
Upper Little Prickley Pear Creek	440	NM	NM	NM	NOMTR	0.5370
Upper Little Prickley Pear Creek	440	ROAD-OPEN	M-07.00	M-08.00	M-08.10	0.5797
Upper Little Prickley Pear Creek	440	M-10.00	M-10.00	NM	NOMTR	0.6449
Upper Little Prickley Pear Creek	440	NM	NM	NM	NOMTR	2.8262
Upper Little Prickley Pear Creek	440	NM	NM	NM	NOMTR	4.2927
Upper Little Prickley Pear Creek	440	M-10.00	M-10.00	NM	NOMTR	7.0222
Upper Little Prickley Pear Creek	466	NOMTR	NOMTR	NOMTR	NOMTR	0.0023
Upper Little Prickley Pear Creek	467	M-07.00	M-07.00	NM	M-08.10	0.0442
Upper Little Prickley Pear Creek	485	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.0143
Upper Little Prickley Pear Creek	485	15	15	15	15	2.8670
Upper Little Prickley Pear Creek	485	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	3.5060
Upper Little Prickley Pear Creek	601	15	15	15	15	0.0798
Upper Little Prickley Pear Creek	601	15	15	15	15	0.1607
Upper Little Prickley Pear Creek	601	15	15	15	15	0.2069
Upper Little Prickley Pear Creek	601	15	15	15	15	0.2111
Upper Little Prickley Pear Creek	601	15	15	15	15	0.4499
Upper Little Prickley Pear Creek	601	15	15	15	15	0.4990
Upper Little Prickley Pear Creek	601	15	15	15	15	0.5460
Upper Little Prickley Pear Creek	601	15	15	15	15	0.5921
Upper Little Prickley Pear Creek	601	15	15	15	15	1.3640
Upper Little Prickley Pear Creek	601	15	15	15	15	4.1971
Upper Little Prickley Pear Creek	1006	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	DECOM	0.3136
Upper Little Prickley Pear Creek	1006	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	1.7270
HUC5 NAME	ID	ALT_1	ALT_2	ALT_3	ALT_4	Miles
Upper Little Pricklev Pear Creek	1819	OPEN-HWY LEGAL	01-STO	DECOM	DECOM	4.3775
Upper Little Prickley Pear Creek	1825	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.0030
Upper Little Prickley Pear Creek	1825	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.0096
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HUC5 NAME	ID	ALT_1	ALT_2	ALT_3	ALT_4	Miles
Upper Little Prickley Pear Creek	1827	09-RES	01-STO	DECOM	DECOM	0.0700
Upper Little Prickley Pear Creek	1827	09-RES	09-RES	DECOM	DECOM	2.2869
Upper Little Prickley Pear Creek	1827	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	2.5752
Upper Little Prickley Pear Creek	1827	09-RES	09-RES	11-RES	10-RES	4.6113
Upper Little Prickley Pear Creek	1828	01-RES	01-RES	DECOM	DECOM	2.9510
Upper Little Prickley Pear Creek	1840	OPEN-HWY LEGAL	OPEN-HWY LEGAL	DECOM	DECOM	0.2851
Upper Little Prickley Pear Creek	1848	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	3.7943
Upper Little Prickley Pear Creek	1872	01-RES	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.3597
Upper Little Prickley Pear Creek	1884	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.2170
Upper Little Prickley Pear Creek	1884	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.6126
Upper Little Prickley Pear Creek	1884	15	15	15	15	0.6411
Upper Little Prickley Pear Creek	1884	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.9960
Upper Little Prickley Pear Creek	1884	15	15	15	15	1.0030
Upper Little Prickley Pear Creek	1884	15	15	15	15	3.4858
Upper Little Prickley Pear Creek	1885	15	15	15	15	2.0746
Upper Little Prickley Pear Creek	1887	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.2720
Upper Little Prickley Pear Creek	1888	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.3622
Upper Little Prickley Pear Creek	4088	NATURAL	NATURAL RECLAIMED	DECOM	DECOM	0.6813
Upper Little Prickley Pear Creek	4133	OPEN-HWY LEGAL	OPEN-HWY LEGAL	01-RES	OPEN-HWY LEGAL	0.3780
Upper Little Prickley Pear Creek	1006-A1	OPEN-HWY LEGAL	01-STO	01-STO	DECOM	0.7359
Upper Little Prickley Pear Creek	1006-A2	OPEN-HWY LEGAL	01-STO	01-STO	DECOM	0.0391
Upper Little Prickley Pear Creek	1006-A3	OPEN-HWY LEGAL	01-STO	01-STO	DECOM	0.2883
Upper Little Prickley Pear Creek	1819-A1	01-RES	01-RES-STO	DECOM	DECOM	0.4283
Upper Little Prickley Pear Creek	1819-A2	01-RES	01-RES-STO	DECOM	DECOM	0.1470
Upper Little Prickley Pear Creek	1819-B1	01-RES	01-RES-STO	DECOM	DECOM	0.2817
Upper Little Prickley Pear Creek	1819-B2	01-RES	01-RES-STO	DECOM	DECOM	0.0817
Upper Little Prickley Pear Creek	1819-B3	01-RES	01-RES-STO	DECOM	DECOM	0.1444
Upper Little Prickley Pear Creek	1819-C1	01-RES	01-RES-STO	DECOM	DECOM	0.5058
Upper Little Prickley Pear Creek	1819-C2	01-RES	01-RES-STO	DECOM	DECOM	0.1040
Upper Little Prickley Pear Creek	1819-D1	01-RES	01-RES-STO	DECOM	DECOM	0.5331
Upper Little Prickley Pear Creek	1825-A1	06-RES	CDNST	CDNST	CDNST	0.6449
Upper Little Prickley Pear Creek	1827-C1	09-RES	01-STO	01-STO	01-STO	1.7820
Upper Little Prickley Pear Creek	1827-F1	09-RES	09-RES	DECOM	DECOM	1.9545
Upper Little Prickley Pear Creek	1827-G1	09-RES	01-STO	DECOM	DECOM	1.2743
Upper Little Prickley Pear Creek	1827-H1	09-RES	01-STO	DECOM	DECOM	1.5575
Upper Little Prickley Pear Creek	1827-H2	09-RES	01-STO	DECOM	DECOM	0.4625
Upper Little Prickley Pear Creek	1827-H3	09-RES	01-STO	DECOM	DECOM	0.2179
Upper Little Prickley Pear Creek	1827-I1	09-RES	01-STO	01-STO	01-STO	0.5567
Upper Little Prickley Pear Creek	1827-J1	06-RES	06-RES	06-RES	01-RES	0.4318
Upper Little Prickley Pear Creek	1827-J2	06-RES	06-RES	06-RES	01-RES	0.4739

HUC5 NAME	ID	ALT_1	ALT_2	ALT_3	ALT_4	Miles
Upper Little Prickley Pear Creek	1827-J3	06-RES	06-RES	DECOM	DECOM	0.2822
Upper Little Prickley Pear Creek	1827-K1	OPEN-HWY LEGAL	01-RES	01-RES-STO	01-RES-STO	0.7236
Upper Little Prickley Pear Creek	1827-L1	09-RES	01-STO	01-STO	01-STO	0.1188
Upper Little Prickley Pear Creek	1828-A1	01-RES	01-RES	DECOM	DECOM	0.816
Upper Little Prickley Pear Creek	1828-A2	01-RES	01-RES	DECOM	DECOM	0.3752
Upper Little Prickley Pear Creek	1828-A3	01-RES	01-RES	DECOM	DECOM	0.332
Upper Little Prickley Pear Creek	1828-A4	01-RES	01-RES	DECOM	DECOM	0.582
Upper Little Prickley Pear Creek	1828-B1	01-RES	01-RES	DECOM	DECOM	0.363
Upper Little Prickley Pear Creek	1840-A1	OPEN-HWY LEGAL	01-STO	DECOM	DECOM	0.013
HUC5 NAME	ID	ALT_1	ALT_2	ALT_3	ALT_4	Miles
Upper Little Pricklev Pear Creek	1840-A1	OPEN-HWY LEGAL	CDNST	CDNST	CDNST	0.023
Upper Little Prickley Pear Creek	1840-A1	OPEN-HWY LEGAL	CDNST	CDNST	CDNST	0.076
Upper Little Prickley Pear Creek	1840-B1	OPEN-HWY LEGAL	CDNST	CDNST	CDNST	0.106
Upper Little Prickley Pear Creek	1884-A1	15	15	15	15	0.640
Upper Little Prickley Pear Creek	1884-B1	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.753
Upper Little Prickley Pear Creek	1884-C1	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.015
Upper Little Prickley Pear Creek	1884-C1	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	DECOM	0.100
Upper Little Prickley Pear Creek	1884-C1	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.112
Upper Little Prickley Pear Creek	1884-C1	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.117
Upper Little Prickley Pear Creek	1884-D1	OPEN-HWY LEGAL	CDNST	CDNST	CDNST	0.097
Upper Little Prickley Pear Creek	1884-D1	OPEN-HWY LEGAL	CDNST	CDNST	CDNST	0.155
Upper Little Prickley Pear Creek	1884-D1	OPEN-HWY LEGAL	CDNST	CDNST	CDNST	0.309
Upper Little Prickley Pear Creek	1888-A1	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	0.394
Upper Little Prickley Pear Creek	4088-A1	NATURAL	NATURAL RECLAIMED	DECOM	DECOM	0.537
Upper Little Prickley Pear Creek	4088-A2	NATURAL	NATURAL RECLAIMED	DECOM	DECOM	0.022
Upper Little Prickley Pear Creek	4133-A1	OPEN-HWY LEGAL	OPEN-HWY LEGAL	01-RES	01-STO	0.818
Upper Little Prickley Pear Creek	440-NEW-2	P-ALT4	P-ALT4	P-ALT4	NM RECONSTRUCTION	0.573
Upper Little Prickley Pear Creek	440-NEW-3	P-ALT4	P-ALT4	P-ALT4	NM RECONSTRUCTION	2.111
Upper Little Prickley Pear Creek	485-001	UC-OPEN	OPEN-HWY LEGAL	DECOM	DECOM	0.107
Upper Little Prickley Pear Creek	485-D1	OPEN-HWY LEGAL	CDNST	CDNST	CDNST	0.001
Upper Little Prickley Pear Creek	485-D1	OPEN-HWY LEGAL	CDNST	CDNST	CDNST	0.002
Upper Little Prickley Pear Creek	485-D1	OPEN-HWY LEGAL	CDNST	CDNST	OPEN-HWY LEGAL	0.167
Upper Little Prickley Pear Creek	485-D1	OPEN-HWY LEGAL	CDNST	CDNST	OPEN-HWY LEGAL	0.172
Upper Little Prickley Pear Creek	485-D1	OPEN-HWY LEGAL	CDNST	CDNST	CDNST	0.281
Upper Little Prickley Pear Creek	485-D1	OPEN-HWY LEGAL	CDNST	CDNST	CDNST	0.579
Upper Little Prickley Pear Creek	485-G1	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	DECOM	1.034
Upper Little Prickley Pear Creek	485-H3	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.000
Upper Little Prickley Pear Creek	485-H3	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.035

HUC5 NAME	ID	ALT_1	ALT_2	ALT_3	ALT_4	Miles
Upper Little Prickley Pear Creek	485-H3	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.2249
Upper Little Prickley Pear Creek	485-I1	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.1852
Upper Little Prickley Pear Creek	601-L1	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.0242
Upper Little Prickley Pear Creek	601-L1	OPEN-HWY LEGAL	01-STO	01-STO	DECOM	0.7688
Upper Little Prickley Pear Creek	601-L2	OPEN-HWY LEGAL	01-STO	01-STO	DECOM	0.4596
Upper Little Prickley Pear Creek	601-L3	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.3410
Upper Little Prickley Pear Creek	601-L3	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	0.5958
Upper Little Prickley Pear Creek	601-L4	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	0.1101
Upper Little Prickley Pear Creek	601-M1	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	0.4083
Upper Little Prickley Pear Creek	601-M2	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	0.1252
Upper Little Prickley Pear Creek	601-N1	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1440
Upper Little Prickley Pear Creek	601-N1	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1506
Upper Little Prickley Pear Creek	601-N1	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.2610
Upper Little Prickley Pear Creek	601-N1	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.5390
Upper Little Prickley Pear Creek	601-N1	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.5550
Upper Little Prickley Pear Creek	601-N1	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.5580
Upper Little Prickley Pear Creek	601-N2	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	0.405
Upper Little Prickley Pear Creek	601-N3	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.0638
Upper Little Prickley Pear Creek	601-N3	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.2420
Upper Little Prickley Pear Creek	601-N4	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.1962
Upper Little Prickley Pear Creek	601-N5	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	0.5900
Upper Little Prickley Pear Creek	601-N6	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	0.1850
Upper Little Prickley Pear Creek	PVT-419	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.295
Upper Little Prickley Pear Creek	PVT-420	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.2708
Upper Little Prickley Pear Creek	PVT-421	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.127
HUC5 NAME	ID	ALT_1	ALT_2	ALT_3	ALT_4	Miles

HUC5 NAME	ID	ALT_1	ALT_2	ALT_3	ALT_4	Miles
Upper Little Pricklev Pear Creek	PVT-422	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0 0638
Upper Little Prickley Pear Creek	PVT-462	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.7719
Upper Little Prickley Pear Creek	PVT-463	NO-ROW	NO-ROW	NO-ROW	NO-ROW	1.6922
Upper Little Prickley Pear Creek	PVT-464	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1097
Upper Little Prickley Pear Creek	PVT-465	NO-ROW	NO-ROW	NO-ROW	NO-ROW	1.7702
Upper Little Prickley Pear Creek	PVT-466	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.3165
Upper Little Prickley Pear Creek	PVT-467	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.7787
Upper Little Prickley Pear Creek	PVT-468	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1265
Upper Little Prickley Pear Creek	PVT-469	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1132
Upper Little Prickley Pear Creek	PVT-476	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.7437
Upper Little Prickley Pear Creek	U-051	UC-CLOSED	01-RES	DECOM	DECOM	2.9730
Upper Little Prickley Pear Creek	U-052	UC-CLOSED	01-RES	DECOM	DECOM	1.0640

HUC5 NAME	ID	ALT_1	ALT_2	ALT_3	ALT_4	Miles
Upper Little Prickley Pear Creek	U-053	UC-CLOSED	01-RES	DECOM	DECOM	0.4722
Upper Little Prickley Pear Creek	U-054	UC-CLOSED	01-RES	DECOM	DECOM	0.5064
Upper Little Prickley Pear Creek	U-056	UC-OPEN	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.1358
Upper Little Prickley Pear Creek	U-057	UC-OPEN	OPEN-HWY LEGAL	DECOM	DECOM	0.1431
Upper Little Prickley Pear Creek	U-1815	UC-CLOSED	01-RES	DECOM	DECOM	1.9234
Upper Little Prickley Pear Creek	U-1827	NM	NM	NM	NOMTR	1.9196
Upper Little Prickley Pear Creek	U-1884	UC-OPEN	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.1897
Upper Little Prickley Pear Creek	U-4133	UC-OPEN	OPEN-HWY LEGAL	DECOM	DECOM	0.6760
Upper Little Prickley Pear Creek	U-4133A	UC-OPEN	OPEN-HWY LEGAL	DECOM	DECOM	0.9284
Upper Little Prickley Pear Creek	U-4133B	UC-CLOSED	01-RES	DECOM	DECOM	0.9820
Upper Little Prickley Pear Creek	U-4133C	UC-OPEN	OPEN-HWY LEGAL	DECOM	DECOM	0.3105
Upper Little Prickley Pear Creek	U-4133D	UC-OPEN	OPEN-HWY LEGAL	DECOM	DECOM	0.9466
Upper Little Prickley Pear Creek	U-NEW-1006	P-ALT2&3	NM NEW CONSTRUCTION	NM NEW CONSTRUCTION	NM NEW CONSTRUCTION	0.3784

Table C-1b.

ID	ВМР	EMP	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	MILES
200	0	15.411	14	14	14	14	15.4109
200	15.411	16.229	14	14	14	14	0.8180
200	16.229	35.599	14	14	14	14	19.3700
200	35.599	39.522	14	14	14	14	3.9230
200	39.522	42.425	14	14	14	14	2.9030
279	0	6.748	14	14	14	14	6.7480
279	6.748	9.703	14	14	14	14	2.9550
279	9.703	38.979	14	14	14	14	29.2760
293	0	4.1	15	15	15	15	4.1000
293	4.1	10.412	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	6.3100
296	0	3.5	15	15	15	15	3.5000
296	3.5	6.992	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	3.4920
329	0	4.7	15	15	15	15	4.7000
329	4.7	9.7	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	5.0000
329	9.7	14.804	15	15	15	15	5.1040
330	0	0.634	STATE	STATE	STATE	STATE	0.6340
330	0.634	1.637	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	1.0030
330	1.637	2.981	STATE	STATE	STATE	STATE	1.3440

ID	ВМР	EMP	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	MILES
330	2.981	8.5	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	5.5190
330	8.5	9.8	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	1.3000
330	9.8	13.3	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	3.5000
330	13.3	14.1	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.8000
330	14.1	14.117	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.0170
330	14.117	15.339	11-RES	11-RES	11-RES	11-RES	1.2217
401	0	2.06	M-07.00	NM	NM	NM	1.6857
404	0	4	M-07.00	NM	NM	NM	4.0000
405	0	1.4	NOMTR	NOMTR	NOMTR	NOMTR	1.5806
405	1.4	1.94	NOMTR	NOMTR	NOMTR	NOMTR	0.6096
417	0	0.852	M-07.00	M-07.00	M-08.00	OLD TRAIL	0.8520
417	0.852	0.967	M-07.00	M-07.00	M-08.00	M-08.10	0.1150
417	0.967	1.539	M-07.00	M-07.00	M-08.00	OLD TRAIL	0.5720
417	1.539	3.997	M-07.00	M-07.00	M-08.00	M-08.10	2.4580
417	3.997	4.206	M-07.00	M-07.00	M-08.00	OLD TRAIL	0.2090
417	4.206	4.241	M-07.00	M-07.00	M-08.00	M-08.10	0.0350
417	4.241	4.484	M-07.00	M-07.00	M-08.00	OLD TRAIL	0.2430
417	4.484	4.525	M-07.00	M-07.00	M-08.00	M-08.10	0.0410
417	4.525	4.623	M-07.00	M-07.00	M-08.00	OLD TRAIL	0.0980
417	4.623	4.76	M-07.00	M-07.00	M-08.00	M-08.10	0.1370
418	0	1.5	M-07.00	M-10.00	NM	NM	1.5000
418	1.5	3.123	M-10.00	M-10.00	NM	NM	1.6230
418	3.123	7.107	M-10.00	NM	NM	NM	3.9840
420	0	3.81	NOMTR	NOMTR	NOMTR-FS	NOMTR-FS	2.8700
438	0	4.213	NOMTR	NOMTR	NOMTR-FS	NOMTR-FS	3.9723
440	9.867	17.042	NOMTR	NOMTR	NOMTR-FS	NOMTR	7.1750

ID	ВМР	EMP	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	MILES
440	17.042	24.063	NOMTR	NOMTR	NOMTR-FS	NOMTR	7.0210
440	24.063	35.249	NM	NM	NM	NOMTR	11.1189
440	35.249	43.754	M-10.00	M-10.00	NM	NOMTR	8.5050
440	43.754	44.251	ROAD-OPEN	M-10.00	NM	NOMTR	0.4970
440	44.251	44.384	ROAD-OPEN	M-10.00	NM	NOMTR	0.1330
440	44.384	45.757	M-10.00	M-10.00	NM	NOMTR	1.3730

ID	ВМР	EMP	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	MILES
440	45.757	45.869	ROAD-OPEN	ROAD-OPEN	ROAD-OPEN	ROAD-OPEN	0.1120
440	45.869	45.908	ROAD-OPEN	ROAD-OPEN	ROAD-OPEN	ROAD-OPEN	0.0390
440	45.908	46.498	M-10.00	M-10.00	NM	NOMTR	0.5900
440	46.498	47.33	ROAD-OPEN	M-07.00	NM	NM	0.8320
440	47.33	48.496	ROAD-OPEN	M-07.00	NM	NOMTR	1.1660
440	48.496	49.01	ROAD-OPEN	ROAD-OPEN	ROAD-OPEN	ROAD-OPEN	0.5140
440	49.01	49.15	M-07.00	M-07.00	NM	OLD TRAIL	0.1400
440	49.15	49.938	M-07.00	M-07.00	NM	NM	0.7880
440	49.938	50.159	ROAD-OPEN	ROAD-OPEN	NM	OLD TRAIL	0.2210
440	50.159	51.016	M-07.00	M-07.00	NM	OLD TRAIL	0.8570
440	51.016	51.394	ROAD-OPEN	M-07.00	NM	OLD TRAIL	0.3780
440	51.394	51.455	ROAD-OPEN	ROAD-OPEN	ROAD-OPEN	ROAD-OPEN	0.0610
440	51.455	51.801	ROAD-OPEN	M-07.00	M-08.00	OPEN-HWY LEGAL	0.3470
440	51.801	52.679	ROAD-OPEN	M-07.00	M-08.00	M-08.10	0.8780
440	52.679	59.058	NM	NM	NM	NOMTR	6.3790
465	0	4.4804	DC	DC	DC	DC	3.6558
466	0	6.475	NOMTR	NOMTR	NOMTR	NOMTR	5.0251
467	0	2.919	M-07.00	M-07.00	NM	M-08.10	2.9190
467	2.919	3.159	M-07.00	M-07.00	NM	OLD TRAIL	0.2400
467	3.159	4.16	M-07.00	M-07.00	NM	M-08.10	1.0010
467	4.16	4.446	M-07.00	M-07.00	NM	OLD TRAIL	0.2860
467	4.446	4.632	M-07.00	M-07.00	NM	M-08.10	0.1860
467	4.632	5.479	M-07.00	M-07.00	NM	OLD TRAIL	0.8470
467	5.479	5.83	M-07.00	M-07.00	NM	M-08.10	0.3510
467	5.83	6.767	M-07.00	M-07.00	NM	OLD TRAIL	0.9370
467	6.767	7.236	M-07.00	M-07.00	NM	M-08.10	0.4690
467	7.236	7.49	M-07.00	M-07.00	NM	OLD TRAIL	0.2540
467	7.49	8.099	M-07.00	M-07.00	NM	M-08.10	0.6090
467	8.099	8.665	M-07.00	M-07.00	NM	OLD TRAIL	0.5660
467	8.665	8.711	M-07.00	M-07.00	NM	M-08.10	0.0460
467	8.711	8.914	M-07.00	M-07.00	NM	OLD TRAIL	0.2030
467	8.914	8.971	M-07.00	M-07.00	NM	M-08.10	0.0570
467	8.971	10.038	M-07.00	M-07.00	NM	OLD TRAIL	1.0670
467	10.038	13.1	M-07.00	M-07.00	NM	M-08.10	3.0620
477	0	2.264	NOMTR	NOMTR	NOMTR-FS	NOMTR-FS	2.2558
481	0	1.448	NOMTR	NOMTR	NOMTR-FS	NOMTR-FS	1.4131

ID	ВМР	EMP	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	MILES
482	0	2.5	NM	NM	NOMTR-FS	NOMTR-FS	2.5000
482	2.5	4.294	NM	NM	NOMTR-FS	NOMTR-FS	1.7940
483	0	1.409	NM	NM	NOMTR-FS	NOMTR-FS	1.1383

ID	ВМР	EMP	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	MILES
483	1.409	3.151	NM	NM	NOMTR-FS	NOMTR-FS	1.407
483	3.151	4.745	NM	NM	NOMTR-FS	NOMTR-FS	1.287
485	0	1.964	M-07.00	NM	NM	NM	1.964
485	0	2.867	15	15	15	15	2.867
485	1.964	2.49	M-07.00	NM	NM	NOMTR	0.526
485	2.49	4.1358	M-07.00	NM	NM	NOMTR	1.643
485	2.867	10.641	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	7.773
487	0	2.314	NOMTR	NOMTR	NOMTR	NOMTR	2.751
487	2.314	5.64	M-10.00	M-10.00	NOMTR	DECOM	2.889
488	0	2.5	NM	NM	NOMTR-FS	NOMTR-FS	2.500
490	0	2	NOMTR	NOMTR	NOMTR-FS	NOMTR	2.000
490	2	4.595	NOMTR	NOMTR	NOMTR-FS	NOMTR	2.595
493	0	1.69	NOMTR	NOMTR	NOMTR-FS	NOMTR	1.690
601	0	4.633	15	15	15	15	4.633
601	4.633	5.801	15	15	15	15	1.168
601	5.801	6.919	15	15	15	15	1.118
601	6.919	7.382	15	15	15	15	0.463
601	7.382	7.901	15	15	15	15	0.519
601	7.901	7.907	15	15	15	15	0.006
601	7.907	8.944	15	15	15	15	1.037
601	8.944	9.563	15	15	15	15	0.619
601	9.563	10.62	15	15	15	15	1.057
601	10.62	11.756	15	15	15	15	1.136
601	11.756	11.758	15	15	15	15	0.002
601	11.758	11.801	15	15	15	15	0.043
601	11.801	11.929	15	15	15	15	0.128
601	11.929	15.012	15	15	15	15	3.083
601	15.012	15.219	15	15	15	15	0.207
601	15.219	15.43	15	15	15	15	0.211
601	15.43	15.51	15	15	15	15	0.080

ID	ВМР	EMP	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	<b>ALTERNATIVE 4</b>	MILES
601	15.51	16.009	15	15	15	15	0.499
601	16.009	16.601	15	15	15	15	0.592
601	16.601	17.051	15	15	15	15	0.450
601	17.051	18.415	15	15	15	15	1.364
601	18.415	18.961	15	15	15	15	0.546
601	18.961	23.158	15	15	15	15	4.197
607	0	4.121	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	4.121
626	0	0.658	15	15	15	15	0.658
626	0.658	1.597	STATE	STATE	STATE	STATE	0.939
626	1.597	3.451	15	15	15	15	1.854
626	3.451	5.337	NO-ROW	NO-ROW	NO-ROW	NO-ROW	1.885
771	0	0.131	OPEN-HWY LEGAL	01-STO	06-RES	06-RES	0.131
771	0.131	0.2	11-RES	01-STO	06-RES	06-RES	0.069
771	0.2	0.806	11-RES	01-STO	06-RES	06-RES	0.605
1006	0	1.727	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	1.727

ID	ВМР	EMP	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	MILES
1006	1.727	2.041	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	DECOM	0.3140
1040	0	0.336	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.3360
1040	0.336	0.87	04-RES	04-RES	04-RES	04-RES	0.5340
1104	0	0.1495	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.1495
1163	0	16.687	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	16.6869
1800	0	1.2	15	15	15	15	1.1996
1800	1.2	1.3	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.1001
1800	1.3	11.517	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	10.2165
1804	0	0.405	06-RES	06-RES	06-RES	06-RES	0.4046
1806	0	0.5	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.5000
1806	0.5	2.211	NATURAL RECLAIMED	NATURAL RECLAIMED	DECOM	DECOM	1.7109
1807	0	4.256	15	15	15	15	4.2558
1808	0	1.746	09-RES	OPEN-HWY LEGAL	OPEN-HWY LEGAL	09-RES	1.7460
1815	0	0.106	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.4170
1815	0.106	0.317	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.2110
1815	0.317	0.417	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1000
1815	0.417	1.578	09-RES	09-RES	11-RES	11-RES	1.1608

ID	ВМР	EMP	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	MILES
1819	0	4.399	OPEN-HWY LEGAL	01-STO	DECOM	DECOM	4.3988
1821	0	3.525	02-RES	11-RES	01-RES-STO	06-RES	3.5248
1821	3.525	5.113	02-RES	11-RES	M-08.00	M-08.10	1.5877
1822	0	3.608	09-RES	09-RES	11-RES	09-RES	3.6077
1823	0	0.113	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.1130
1823	0.113	2.72	09-RES	OPEN-HWY LEGAL	OPEN-HWY LEGAL	09-RES	2.6070
1823	2.72	2.992	09-RES	OPEN-HWY LEGAL	01-STO	01-STO	0.2720
1824	0	5.078	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	5.0780
1824	5.078	8.539	06-RES	06-RES	06-RES	06-RES	3.4606
1825	0	0.11	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.1100
1825	0.11	2.001	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	1.8910
1825	2.001	3.082	11-RES	11-RES	11-RES	11-RES	1.0810
1825	3.082	4.128	NO-ROW	NO-ROW	NO-ROW	NO-ROW	1.0460
1825	4.128	4.287	11-RES	01-STO	01-STO	01-RES	0.1590
1825	4.287	4.544	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.2570
1825	4.544	4.853	11-RES	01-STO	01-STO	01-STO	0.3090
1826	0	2.159	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	2.1590
1826	2.159	6.923	10-RES	10-RES	12-RES	12-RES	4.7637
1827	0	3.202	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	3.2020
1827	3.202	7.813	09-RES	09-RES	11-RES	10-RES	4.6110
1827	7.813	10.099	09-RES	09-RES	DECOM	DECOM	2.2860
1827	10.099	10.17	09-RES	01-STO	DECOM	DECOM	0.0709
1828	1.857	4.808	01-RES	01-RES	DECOM	DECOM	2.9510
1829	0	0.312	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.3120
1829	0.312	0.65	09-RES	09-RES	11-RES	09-RES	0.3380
1829	0.65	3.719	09-RES	09-RES	11-RES	09-RES	3.0689
1830	0	2.865	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	2.8648
1830	2.865	2.95	09-RES	09-RES	11-RES	09-RES	0.0849

ID	ВМР	EMP	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	MILES
1830	2.95	5.066	09-RES	09-RES	11-RES	09-RES	2.1154
1831	0	3.339	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	3.3390
1831	3.339	5.4	09-RES	09-RES	11-RES	11-RES	2.0610

ID	ВМР	EMP	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	MILES
1831	5.4	7.236	09-RES	09-RES	11-RES	11-RES	1.8355
1832	0	1.07	OPEN-HWY LEGAL	OPEN-HWY LEGAL	06-RES	06-RES	1.0700
1832	1.07	4.124	06-RES	06-RES	06-RES	06-RES	3.0540
1833	0	0.16	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.1600
1833	0.16	1	09-RES	09-RES	11-RES	09-RES	0.8400
1833	1	1.906	09-RES	09-RES	11-RES	09-RES	0.9060
1833	1.906	2.852	09-RES	01-STO	01-STO	01-STO	0.9460
1833	2.852	3.779	09-RES	01-STO	01-STO	01-STO	0.9269
1834	0	5.968	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	5.9681
1837	0	1.1	06-RES	06-RES	06-RES	06-RES	1.1000
1837	1.1	1.763	06-RES	06-RES	06-RES	06-RES	0.6630
1838	0	1.57	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	1.5700
1838	1.57	5.659	10-RES	10-RES	12-RES	12-RES	4.0890
1839	0	0.68	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.6800
1839	0.68	2.654	NATURAL RECLAIMED	NATURAL RECLAIMED	DECOM	DECOM	1.9738
1840	0	0.313	OPEN-HWY LEGAL	OPEN-HWY LEGAL	DECOM	DECOM	0.3130
1841	0	0.509	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.5090
1841	0.509	2.441	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	1.9320
1841	2.441	4.656	06-RES	M-07.00	OPEN-HWY LEGAL	OPEN-HWY LEGAL	2.2150
1841	4.656	6.133	06-RES	M-07.00	M-08.00	M-08.10	1.4770
1841	6.133	7.132	06-RES	06-RES	06-RES	06-RES	0.9990
1842	0	3.079	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	09-RES	3.0790
1843	0	1.159	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	01-STO	1.1587
1844	1.536	2.15	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	01-STO	0.6100
1847	0	1.325	06-RES	06-RES	06-RES	06-RES	1.3246
1848	0	3.794	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	3.7940
1872	0	0.378	01-RES	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.3777
1873	0	0.533	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.5330
1879	0	1.542	OPEN-HWY LEGAL	M-07.00	NM	DECOM	1.5417
1881	0	0.16	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.1601
1881	0.16	7.054	06-RES	06-RES	06-RES	06-RES	6.8930
1882	0	1.71	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	1.7100
1882	1.71	2.072	01-RES	01-RES	01-RES	01-RES	0.3617
1883	0	0.136	OPEN-HWY LEGAL	OPEN-HWY LEGAL	06-RES	06-RES	0.1360
1883	0.136	3.6	06-RES	06-RES	06-RES	06-RES	3.4640

ID	ВМР	EMP	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	MILES
1883	3.6	4.103	06-RES	06-RES	06-RES	06-RES	0.5031
1884	0	3.486	15	15	15	15	3.4860
1884	3.486	4.127	15	15	15	15	0.6410
1884	4.127	5.13	15	15	15	15	1.0030
1884	5.13	5.347	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.2170
1884	5.347	6.343	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.9960
1884	6.343	7.788	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	1.4450

ID	ВМР	EMP	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	MILES
1885	0	2.075	15	15	15	15	2.0746
1886	0	2.712	09-RES	01-STO	01-STO	01-STO	2.7113
1887	0	0.272	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.2720
1888	0	0.362	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.3620
1891	0	0.994	09-RES	09-RES	11-RES	09-RES	0.9940
1891	0.994	1.869	DC	M-07.00	M-08.00	M-08.10	0.8750
1891	1.869	3.137	09-RES	09-RES	11-RES	09-RES	1.2680
1892	0	4.85	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	4.8500
1892	4.85	10.016	06-RES	06-RES	06-RES	06-RES	5.1661
1893	0	2.396	06-RES	06-RES	06-RES	06-RES	2.3960
4043	0	1.091	12-RES	12-RES	12-RES	09-RES	1.0910
4043	1.091	2.151	12-RES	12-RES	M-08.00	M-08.105	1.0600
4043	2.151	3.156	12-RES	01-STO	01-STO	01-STO	1.0050
4047	0	0.299	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	0.2990
4047	0.299	1.891	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	1.5915
4050	0	0.377	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	0.3770
4080	0	0.08	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.0800
4080	0.08	0.55	01-RES	DECOM	DECOM	DECOM	0.4700
4080	0.55	6.105	DC	DC	DC	DC	5.5547
4081	0	3.596	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	3.5960
4082	0	0.363	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.3630
4082	0.363	0.602	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.2390
4082	0.602	2.782	OPEN-HWY LEGAL	M-07.00	M-08.00	M-08.105	2.1800
4082	2.782	3.481	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.6990
4082	3.481	3.977	OPEN-HWY LEGAL	M-07.00	M-08.00	M-08.105	0.4960

ID	ВМР	EMP	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	MILES
4082	3.977	4.259	OPEN-HWY LEGAL	01-STO	DECOM	DECOM	0.2817
4083	0	0.976	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.9760
4083	0.976	1.091	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1150
4083	1.091	1.593	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.5019
4084	0	0.105	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1050
4084	0.105	1.711	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	1.6060
4084	1.711	1.821	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1098
4085	0	0.03	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.0300
4085	0.03	0.394	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.3640
4085	0.394	0.51	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1160
4085	0.51	0.95	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.4399
4086	0	0.312	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.3120
4086	0.312	2.481	OPEN-HWY LEGAL	M-07.00	M-08.00	M-08.105	2.1690
4087	0	0.306	01-RES	01-RES	01-RES	06-RES	0.3060
4087	0.306	0.42	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1140
4087	0.42	0.473	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.0530
4087	0.473	0.591	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1180
4087	0.591	0.684	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.0930
4087	0.684	0.832	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1480
4087	0.832	1.089	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.2570

ID	ВМР	EMP	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	MILES
4087	1.089	1.172	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.0830
4087	1.172	1.401	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.2290
4087	1.401	1.603	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.2020
4087	1.603	2.743	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	1.1400
4087	2.743	3.417	06-RES	06-RES	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.6740
4087	3.417	4.217	06-RES	06-RES	06-RES	06-RES	0.8000
4087	4.217	5.423	06-RES	06-RES	DECOM	DECOM	1.2058
4088	0	0.5	NATURAL RECLAIMED	NATURAL RECLAIMED	DECOM	DECOM	0.5000
4088	0.5	4.007	NATURAL RECLAIMED	NATURAL RECLAIMED	DECOM	DECOM	3.5069
4089	0	1.091	06-RES	06-RES	DECOM	DECOM	1.0910
4090	0	1.497	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	1.4970
4090	1.497	2.534	OPEN-HWY LEGAL	01-STO	M-08.00	M-08.105	1.0370

ID	ВМР	EMP	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	<b>ALTERNATIVE 4</b>	MILES
4090	2.534	2.741	OPEN-HWY LEGAL	01-STO	DECOM	DECOM	0.2070
4106	0	0.3	15	15	15	15	0.3000
4106	0.3	1	15	15	15	15	0.7000
4106	1	10.5	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	9.5000
4106	10.5	20.564	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	10.0640
4108	0	1.067	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	1.0670
4108	1.067	2.894	01-RES	01-RES	01-RES	06-RES	1.8270
4112	0	0.1394	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.1394
4113	0	1.239	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	1.2390
4113	1.239	3.063	NATURAL RECLAIMED	OPEN-HWY LEGAL	DECOM	DECOM	1.8236
4128	0	0.748	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.7476
4131	0	0.5259	04-RES	04-RES	04-RES	04-RES	0.5259
4133	0	1.454	OPEN-HWY LEGAL	OPEN-HWY LEGAL	01-RES	OPEN-HWY LEGAL	1.4540
4134	0	1.004	15	15	15	15	1.0040
4134	1.004	1.366	15	15	15	15	0.3620
4134	1.366	4.362	15	15	15	15	2.9959
4135	0	0.114	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.1140
4135	0.114	2.932	09-RES	09-RES	11-RES	09-RES	2.8177
4195	0	1.493	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	1.4949
4195	1.493	1.907	OPEN-HWY LEGAL	OPEN-HWY LEGAL	DECOM	DECOM	0.4140
4196	0	4.843	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	4.8430
8963	0	2.471	09-RES	01-STO	DECOM	DECOM	2.4710
1006-A1	0	0.736	OPEN-HWY LEGAL	01-STO	01-STO	DECOM	0.7359
1006-A2	0	0.039	OPEN-HWY LEGAL	01-STO	01-STO	DECOM	0.0390
1006-A3	0	0.288	OPEN-HWY LEGAL	01-STO	01-STO	DECOM	0.2880
1040-A1	0	0.451	04-RES	04-RES	04-RES	04-RES	0.4506
1040-B1	0	0.222	04-RES	04-RES	04-RES	04-RES	0.2217
1104-A1	0	0.2867	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.2867
1104-B1	0	0.273	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.2730
1163-	0	0.539	OPEN-HWY LEGAL	OPEN-HWY LEGAL	DECOM	DECOM	0.5388
1163-	0	0.165	OPEN-HWY LEGAL	OPEN-HWY LEGAL	DECOM	DECOM	0.1650
1163-	0	0.322	OPEN-HWY LEGAL	OPEN-HWY LEGAL	DECOM	DECOM	0.3215
1163-	0	0.447	OPEN-HWY LEGAL	OPEN-HWY LEGAL	DECOM	DECOM	0.4470

ID	ВМР	EMP	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	MILES
1163-	0	0.212	OPEN-HWY LEGAL	OPEN-HWY LEGAL	DECO	DECOM	0.2116
1163-A1	0	2.268	09-RES	09-RES	11-	11-RES	2.2678
1163-A2	0	0.28	01-RES	01-RES-STO	01-RES-STO	01-RES-STO	0.2796
1163-A3	0	2.065	09-RES	09-RES	11-	11-RES	2.0650
1163-A4	0	0.537	09-RES	09-RES	11-	11-RES	0.5368
1163-A5	0	0.1796	09-RES	09-RES	11-	11-RES	0.1796
1163-B1	0	0.359	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.3590
1163-B1	0.359	2.155	09-RES	09-RES	11-	11-RES	1.7960
1163-B2	0	2.715	09-RES	09-RES	11-	11-RES	2.7148
1163-B3	0	0.707	09-RES	09-RES	11-	11-RES	0.7066
1163-B4	0	0.389	09-RES	09-RES	11-	11-RES	0.3889
1163-B5	0	0.224	09-RES	09-RES	11-	11-RES	0.2240
1163-C1	0	0.721	01-RES	09-RES	11-	11-RES	0.7206
1163-C2	0	0.75	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	1.5000
1163-C3	0	0.191	09-RES	09-RES	11-	11-RES	0.1910
1163-C4	0	0.661	01-RES	01-RES-STO	01-RES-STO	01-RES-STO	0.6610
1163-D1	0	1.57	06-RES	06-RES	06-	06-RES	1.5698
1163-D2	0	0.679	06-RES	06-RES	06-	06-RES	0.6790
1163-D3	0	0.214	06-RES	06-RES	06-	06-RES	0.2140
1163-D4	0	0.69	06-RES	06-RES	06-	06-RES	0.6900
1163-D5	0	0.313	06-RES	06-RES	06-	06-RES	0.3128
1163-E1	0	0.243	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.2430
1163-E1	0.243	2.032	09-RES	OPEN-HWY LEGAL	OPEN-HWY LEGAL	09-RES	1.7888
1163-E2	0	0.628	01-RES	01-RES-STO	01-RES-STO	01-RES-STO	0.6276
1163-E3	0	0.096	01-RES	01-RES-STO	01-RES-STO	01-RES-STO	0.0960
1163-F1	0	0.91	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.9100
1163-F1	0.9	1.653	NO-ROW	NO-ROW	NO-	NO-ROW	0.7428
1163-G1	0	1.732	OPEN-HWY LEGAL	01-STO	01-	01-STO	1.7319
1163-H1	0	0.998	01-RES	01-RES-STO	01-RES-STO	01-RES-STO	0.9980
1163-H2	0	0.591	01-RES	01-RES-STO	01-RES-STO	01-RES-STO	0.5908
1163-J1	0	0.237	01-RES	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.2371
1163-K1	0	0.831	01-RES	01-RES-STO	01-RES-STO	01-RES-STO	0.8310
1163-K2	0	0.0701	01-RES	01-RES-STO	01-RES-STO	01-RES-STO	0.0701
1163-L1	0	0.6093	01-RES	01-RES-STO	01-RES-STO	01-RES-STO	0.6093

ID	ВМР	EMP	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	MILES
1800-A1	0	1.234	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	DECOM	1.2335
1800-A2	0	0.1814	01-RES	01-RES-STO	01-RES-STO	DECOM	0.1814
1800-A3	0	0.3982	01-RES	01-RES	01-	DECOM	0.3982
1800-A4	0	0.027	01-RES	01-RES	01-	DECOM	0.0267
1800-B1	0	0.495	06-RES	06-RES	06-	06-RES	0.4948
1800-B1	0.495	2.407	06-RES	06-RES	06-	06-RES	1.9115
1800-B2	0	0.308	01-RES	01-RES	01-	06-RES	0.3080
1800-B3	0	0.5044	01-RES	01-RES	01-	06-RES	0.5044
1800-B4	0	0.142	01-RES	01-RES	01-	06-RES	0.1420
1800-B5	0	0.097	01-RES	01-RES	01-	06-RES	0.0970
1800-C1	0	0.201	01-RES	01-RES-STO	01-RES-STO	01-RES-STO	0.2010

ID	ВМР	EMP	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	MILES
1800-C1	0.201	0.752	01-RES	01-RES-STO	01-RES-STO	01-RES-STO	0.5507
1804-A1	0	0.359	06-RES	06-RES	06-RES	06-RES	0.3569
1804-B1	0	1.448	06-RES	06-RES	06-RES	06-RES	1.4479
1808-A1	0	0.254	09-RES	01-STO	01-STO	01-STO	0.2540
1815-	0	0.111	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.1110
1815-	0	0.543	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.5430
1815-	0	0.333	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.3330
1815-A1	0	1.257	09-RES	09-RES	11-RES	11-RES	1.2570
1819-A1	0	0.4283	01-RES	01-RES-STO	DECOM	DECOM	0.4283
1819-A2	0	0.147	01-RES	01-RES-STO	DECOM	DECOM	0.1470
1819-B1	0	0.2817	01-RES	01-RES-STO	DECOM	DECOM	0.2817
1819-B2	0	0.0817	01-RES	01-RES-STO	DECOM	DECOM	0.0817
1819-B3	0	0.1444	01-RES	01-RES-STO	DECOM	DECOM	0.1444
1819-C1	0	0.5058	01-RES	01-RES-STO	DECOM	DECOM	0.5058
1819-C2	0	0.104	01-RES	01-RES-STO	DECOM	DECOM	0.1040
1819-D1	0	0.5331	01-RES	01-RES-STO	DECOM	DECOM	0.5331
1821-A1	0	0.669	01-RES	01-RES-STO	01-RES-STO	01-RES-STO	0.6690
1821-B1	0	0.591	01-RES	01-RES-STO	M-08.00	M-08.10	0.5910
1821-B1-	0	0.153	P-ALT3	P-ALT3	MT NEW CONSTRUCTION	MT NEW CONSTRUCTION	0.1530
1821-C1	0	0.938	01-RES	01-RES-STO	01-RES-STO	01-RES-STO	0.9369

ID	ВМР	EMP	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	MILES
1822-A1	0	0.571	09-RES	01-STO	01-STO	01-STO	0.5710
1823-A1	0	0.998	09-RES	01-STO	01-STO	01-STO	0.9981
1823-B1	0	0.195	09-RES	01-STO	01-STO	01-STO	0.1950
1823-B1	0.195	0.934	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.7390
1823-B1	0.934	1.353	09-RES	01-STO	01-STO	DECOM	0.4190
1823-B1	1.353	1.912	09-RES	01-STO	01-STO	01-STO	0.5590
1823-E1	0	0.349	09-RES	OPEN-HWY LEGAL	DECOM	DECOM	0.3490
1823-F1	0	0.5265	09-RES	01-STO	DECOM	DECOM	0.5265
1823-G1	0	0.607	09-RES	OPEN-HWY LEGAL	DECOM	DECOM	0.6070
1823-H1	0	0.151	09-RES	OPEN-HWY LEGAL	01-STO	01-STO	0.1510
1823-J1	0	0.758	09-RES	01-RES	01-RES	01-STO	0.7580
1823-J1	0.758	0.987	09-RES	01-RES	01-RES	DECOM	0.2290
1823-K1	0	0.568	09-RES	01-STO	01-STO	01-STO	0.5678
1823-K2	0	0.192	09-RES	01-STO	01-STO	01-STO	0.1920
1823-L1	0	0.225	09-RES	01-STO	01-STO	01-STO	0.2250
1824-A1	0	0.333	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.3328
1824-B1	0	2.071	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	2.0710
1824-B2	0	0.501	01-RES	01-RES-STO	01-RES-STO	01-RES-STO	0.5010
1824-C1	0	1.665	06-RES	06-RES	06-RES	M-08.105	1.6650
1824-D1	0	2.433	06-RES	M-07.00	M-08.00	01-STO	2.4330
1824-D1	2.433	2.925	06-RES	06-RES	06-RES	01-STO	0.4920
1824-E1	0	0.436	06-RES	06-RES	06-RES	06-RES	0.4360
1824-F1	0	1.657	06-RES	06-RES	06-RES	06-RES	1.6571
1824-G1	0	0.146	06-RES	06-RES	06-RES	OPEN-HWY LEGAL	0.1460
1824-G1	0.146	0.728	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.5800

ID	ВМР	EMP	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	MILES
1824-G1	0.728	0.815	06-RES	06-RES	06-RES	06-RES	0.0800
1824-H1	0	1.198	06-RES	06-RES	06-RES	06-RES	1.1981
1824-I1	0	0.495	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	0.4945
1824-NEW	0	0.06	P-ALT4	P-ALT4	P-ALT4	ROAD RECONSTRUCTION	0.0600
1825-A1	0	1.375	06-RES	CDNST	CDNST	CDNST	1.3747
1825-B1	0	2.124	OPEN-HWY LEGAL	OPEN-HWY LEGAL	DECOM	DECOM	2.1235
1825-C1	0	0.887	11-RES	11-RES	M-08.00	M-08.10	0.8869

ID	ВМР	EMP	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	MILES
1825-D1	0	0.3415	01-RES	01-RES-STO	01-RES-STO	01-RES-STO	0.3415
1825-E1	0	0.49	06-RES	06-RES	DECOM	DECOM	0.4900
1825-F1	0	0.381	06-RES	06-RES	06-RES	06-RES	0.3809
1826-B1	0	1.252	01-RES	01-RES-STO	DECOM	DECOM	1.2517
1826-B2	0	0.305	01-RES	01-RES-STO	DECOM	DECOM	0.3050
1826-B3	0	0.143	01-RES	01-RES-STO	DECOM	DECOM	0.1426
1826-G1	0	0.135	01-RES	01-RES	DECOM	DECOM	0.1350
1826-H1	0	0.723	01-RES	01-RES-STO	DECOM	DECOM	0.7225
1826-I1	0	0.798	01-RES	01-RES-STO	DECOM	DECOM	0.7977
1826-J1	0	2.147	01-RES	01-RES-STO	DECOM	DECOM	2.1470
1826-K1	0	1.735	01-RES	01-RES	DECOM	DECOM	1.7350
1827-C1	0	1.782	09-RES	01-STO	01-STO	01-STO	1.7820
1827-F1	0	1.954	09-RES	09-RES	DECOM	DECOM	1.9540
1827-G1	0	1.274	09-RES	01-STO	DECOM	DECOM	1.2740
1827-H1	0	1.557	09-RES	01-STO	DECOM	DECOM	1.5570
1827-H2	0	0.462	09-RES	01-STO	DECOM	DECOM	0.4620
1827-H3	0	0.218	09-RES	01-STO	DECOM	DECOM	0.2179
1827-I1	0	0.557	09-RES	01-STO	01-STO	01-STO	0.5567
1827-J1	0	0.432	06-RES	06-RES	06-RES	01-RES	0.4318
1827-J2	0	0.474	06-RES	06-RES	06-RES	01-RES	0.4739
1827-J3	0	0.282	06-RES	06-RES	DECOM	DECOM	0.2820
1827-K1	0	0.724	OPEN-HWY LEGAL	01-RES	01-RES-STO	01-RES-STO	0.7236
1827-L1	0	0.119	09-RES	01-STO	01-STO	01-STO	0.1188
1828-A1	0	0.816	01-RES	01-RES	DECOM	DECOM	0.8161
1828-A2	0	0.3752	01-RES	01-RES	DECOM	DECOM	0.3752
1828-A3	0	0.332	01-RES	01-RES	DECOM	DECOM	0.3320
1828-A4	0	0.5828	01-RES	01-RES	DECOM	DECOM	0.5828
1828-B1	0.643	1.006	01-RES	01-RES	DECOM	DECOM	0.3631
1829-A1	0	1.141	09-RES	09-RES	11-RES	09-RES	1.1410
1829-B1	0	0.9633	09-RES	09-RES	11-RES	09-RES	0.9633
1829-B2	0	0.2294	09-RES	09-RES	06-RES	DECOM	0.2294
1829-C1	0	1	09-RES	09-RES	11-RES	09-RES	1.0000
1829-C1	1	1.4	09-RES	09-RES	11-RES	09-RES	0.4000
1829-C2	0	0.4593	09-RES	09-RES	11-RES	09-RES	0.4593
1829-C3	0	0.3036	09-RES	09-RES	11-RES	09-RES	0.3036

ID	ВМР	EMP	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	MILES
1829-C4	0	0.5987	09-RES	09-RES	11-RES	09-RES	0.5987
1830-A1	0	2.404	01-RES	01-RES-STO	01-RES-STO	01-RES-STO	2.4040
1830-B1	0	1.004	09-RES	09-RES	11-RES	09-RES	1.0035

ID	ВМР	EMP	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	MILES
1830-B2	0	0.783	01-RES	01-RES	01-RES	06-RES	0.7824
1830-C1	0	0.906	09-RES	09-RES	11-RES	09-RES	0.9056
1831-A1	0	1.205	09-RES	09-RES	11-RES	11-RES	1.2049
1831-A2	0	0.322	09-RES	09-RES	11-RES	11-RES	0.3220
1832-A1	0	0.031	OPEN-HWY LEGAL	OPEN-HWY LEGAL	06-RES	06-RES	0.0310
1832-A1	0.031	2.086	06-RES	06-RES	06-RES	06-RES	2.0550
1833-A1	0	0.5216	02-RES	01-STO	01-STO	01-STO	0.5216
1833-B1	0	1.87	02-RES	01-STO	01-STO	01-STO	1.8698
1833-B2	0	0.1456	01-RES	01-RES-STO	01-RES-STO	01-RES-STO	0.1456
1833-C1	0	0.524	09-RES	01-STO	01-STO	01-STO	0.5240
1833-D1	0	0.304	09-RES	01-STO	01-STO	01-STO	0.3040
1834-001	0	0.031	01-RES	01-RES	01-RES	01-RES	0.0310
1834-001	0.031	0.107	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.0760
1834-A1	0	0.1296	01-RES	01-RES	DECOM	DECOM	0.1296
1834-B1	0	0.2303	01-RES	01-RES	OPEN-HWY LEGAL	DECOM	0.2303
1834-C1	0	0.037	OPEN-HWY LEGAL	01-STO	01-STO	DECOM	0.0370
1834-C1	0.037	0.181	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1440
1834-C1	0.181	0.29	OPEN-HWY LEGAL	01-STO	01-STO	DECOM	0.1090
1834-D1	0	0.7473	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.7473
1837-A1	0	0.543	06-RES	06-RES	06-RES	06-RES	0.5430
1837-B1	0	1.982	06-RES	06-RES	06-RES	06-RES	1.9817
1837-B2	0	0.557	06-RES	06-RES	06-RES	06-RES	0.5569
1837-B3	0	0.868	06-RES	06-RES	06-RES	06-RES	0.8680
1837-B4	0	0.222	06-RES	06-RES	06-RES	06-RES	0.2220
1837-B5	0	0.139	06-RES	06-RES	06-RES	06-RES	0.1385
1838-001	0	0.103	UC-OPEN	OPEN-HWY LEGAL	DECOM	DECOM	0.1030
1838-A1	0	2.032	10-RES	10-RES	DECOM	12-RES	2.0314
1838-A2	0	0.933	10-RES	10-RES	DECOM	DECOM	0.9325
1838-A3	0	2.087	10-RES	10-RES	DECOM	DECOM	2.0864

ID	ВМР	EMP	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	MILES
1838-B1	0	0.312	10-RES	10-RES	DECOM	DECOM	0.3112
1838-C1	0	1.032	10-RES	01-STO	DECOM	DECOM	1.0317
1838-C3	0	0.392	DC	DC	DC	DC	0.3921
1838-C4	0	0.714	DC	DC	DC	DC	0.7140
1838-C6	0	0.341	DC	DC	DC	DC	0.3409
1838-D1	0	1.029	10-RES	10-RES	DECOM	DECOM	1.0284
1838-D2	0	1.117	10-RES	10-RES	DECOM	DECOM	1.1164
1838-D3	0	0.352	DC	DC	DC	DC	0.3512
1838-E1	0	1.007	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	1.0070
1838-E2	0	0.252	10-RES	10-RES	DECOM	DECOM	0.2515
1838-F1	0	0.217	10-RES	01-STO	DECOM	DECOM	0.2170
1840-A1	0	0.136	OPEN-HWY LEGAL	CDNST	CDNST	CDNST	0.1360
1840-A1	0.136	0.363	OPEN-HWY LEGAL	01-STO	DECOM	DECOM	0.2270
1840-B1	0	0.493	OPEN-HWY LEGAL	CDNST	CDNST	CDNST	0.4930
1841-A1	0	0.654	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.6540
1841-B1	0	1.535	06-RES	06-RES	06-RES	06-RES	1.5350

ID	ВМР	EMP	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	MILES
1841-C1	0	2.3416	06-RES	06-RES	06-RES	06-RES	2.3416
1841-D1	0	0.348	06-RES	M-07.00	M-08.00	M-08.10	0.3480
1841-D1	0.348	0.868	06-RES	M-07.00	06-RES	06-RES	0.5200
1841-D1- NEW2	0	1.005	P-ALT3	P-ALT3	MT NEW CONSTRUCTION	MT NEW CONSTRUCTION	1.0050
1841-F1	0	0.076	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.0760
1841-F1	0.076	0.272	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1960
1841-G1	0	0.86	06-RES	06-RES	06-RES	06-RES	0.8600
1841-H2	0	0.4564	06-RES	06-RES	06-RES	06-RES	0.4564
1841-H3	0	0.279	06-RES	06-RES	06-RES	06-RES	0.2788
1841-H4	0	0.255	06-RES	06-RES	06-RES	06-RES	0.2549
1841-J1	0	0.314	06-RES	M-07.00	OPEN-HWY LEGAL	06-RES	0.3139
1841-K1	0	0.195	06-RES	06-RES	06-RES	06-RES	0.1949
1841-K2	0	0.17	06-RES	06-RES	06-RES	06-RES	0.1697
1842-A1	0	1.01	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	01-STO	1.0096
1842-A2	0	0.468	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	DECOM	0.4678

ID	ВМР	EMP	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	MILES
1842-B1	0	0.436	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	01-STO	0.4359
1842-B2	0	1.746	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	01-STO	1.7456
1842-B3	0	0.22	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	DECOM	0.2196
1842-C1	0	0.401	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.4010
1842-D1	0	0.439	DC	DC	DC	DC	0.4390
1842-E1	0	0.276	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	DECOM	0.2759
1843-A1	0	0.58	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	01-STO	0.5800
1847-A1	0	0.746	06-RES	06-RES	06-RES	06-RES	0.7453
1847-B1	0	0.433	06-RES	06-RES	06-RES	06-RES	0.4327
1881-A1	0	2.112	06-RES	06-RES	06-RES	06-RES	2.1116
1881-A2	0	0.484	01-RES	01-RES	01-RES	06-RES	0.4839
1881-B1	0	0.624	01-RES	01-RES	01-RES	01-RES	0.6240
1881-B1	0.624	1.442	06-RES	06-RES	06-RES	06-RES	0.8179
1881-B2	0	0.704	01-RES	01-RES	01-RES	01-RES	0.7040
1881-B3	0	0.132	01-RES	01-RES	01-RES	01-RES	0.1320
1881-C1	0	2.461	06-RES	06-RES	06-RES	06-RES	2.4610
1881-C3	0	0.183	01-RES	01-RES	01-RES	06-RES	0.1827
1881-D1	0	0.702	01-RES	01-RES	01-RES	06-RES	0.7014
1881-E1	0	0.83	06-RES	06-RES	06-RES	06-RES	0.8300
1881-E2	0	1.186	06-RES	06-RES	06-RES	06-RES	1.1853
1881-F1	0	0.8	06-RES	06-RES	06-RES	06-RES	0.8000
1881-F1	0	0.93	06-RES	06-RES	06-RES	06-RES	0.1301
1881-H1	0	0.3998	01-RES	01-RES	01-RES	06-RES	0.3998
1882-A1	0	0.266	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.2653
1882-B1	0	0.142	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.1417
1882-C1	0	0.148	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.1480
1883-D1	0	0.317	06-RES	06-RES	06-RES	06-RES	0.3170
1883-E1	0	0.331	06-RES	06-RES	06-RES	06-RES	0.3310
1883-F1	0	0.355	06-RES	06-RES	06-RES	06-RES	0.3549
1884-A1	0	0.641	15	15	15	15	0.6408

ID	ВМР	EMP	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	MILES
1884-B1	0	0.754	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.7539
1884-C1	0	0.015	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.0150

ID	ВМР	EMP	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	MILES
1884-C1	0.015	0.127	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.1120
1884-C1	0.127	0.245	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1180
1884-C1	0.245	0.345	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	DECOM	0.1050
1884-D1	0	1.998	OPEN-HWY LEGAL	CDNST	CDNST	CDNST	1.9980
1888-A1	0	0.394	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	0.3940
1891-A1	0	0.567	09-RES	01-STO	01-STO	01-STO	0.5670
1891-B1	0	0.49	09-RES	09-RES	11-RES	09-RES	0.4900
1892-A1	0	0.422	09-RES	01-STO	01-STO	01-STO	0.4220
1892-B1	0	0.859	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	0.8590
1892-C1	0	0.273	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.2730
1892-C1	0.273	4.379	09-RES	09-RES	11-RES	09-RES	4.1056
1892-C2	0	0.55	09-RES	01-STO	01-STO	01-STO	0.5500
1892-C3	0	1.858	09-RES	09-RES	11-RES	09-RES	1.8579
1892-D1	0	0.517	OPEN-HWY LEGAL	01-RES	01-RES	06-RES	0.5166
1892-D3	0	0.572	OPEN-HWY LEGAL	01-RES	01-RES	NM	0.5720
1892-D3	0.572	0.987	OPEN-HWY LEGAL	01-RES	01-RES	DECOM	0.4150
1892-D4	0	0.4	OPEN-HWY LEGAL	01-STO	01-STO	DECOM	0.3996
1892-F1	0	1.4004	06-RES	06-RES	06-RES	06-RES	1.4004
1892-G1	0	0.814	06-RES	06-RES	06-RES	06-RES	0.8140
1892-H1	0	0.428	OPEN-HWY LEGAL	01-STO	01-STO	OPEN-HWY LEGAL	0.4280
1892-J1	0	2.072	06-RES	06-RES	06-RES	06-RES	2.0720
1892-J1	2.072	2.47	06-RES	06-RES	06-RES	06-RES	0.3980
1893-A1	0	0.642	06-RES	06-RES	06-RES	06-RES	0.6420
1893-B1	0	2.192	06-RES	06-RES	06-RES	06-RES	2.1916
1893-C1	0	0.4	06-RES	06-RES	06-RES	06-RES	0.4000
1893-C1	0	0.848	06-RES	06-RES	06-RES	06-RES	0.4480
293-001	0	0.072	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.0720
293-002	0	0.068	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.0680
293-003	0	0.137	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.1370
293-A1	0	0.319	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.3190
293-B1	0	0.467	OPEN-HWY LEGAL	DECOM	DECOM	DECOM	0.4670
293-B1	0.467	0.733	01-RES	DECOM	DECOM	DECOM	0.2660
293-B1	0.733	1.244	DC	DC	DC	DC	0.5107
293-C1	0	1.5499	DC	DC	DC	DC	1.5499
293-D1	0	1	DC	DC	DC	DC	0.9995

ID	ВМР	EMP	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	MILES
293-E1	0	1.155	01-RES	DECOM	DECOM	DECOM	1.1550
296-001	0	0.533	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.5330
296-A1	0	1.04	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	1.0400
296-A1	1	4.585	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	01-STO	3.5400
296-A2	0	0.431	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.4310
296-A2	0.431	3.822	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	3.3900
296-A3	0	1.985	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	1.9849
296-B1	0	0.165	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.1649

ID	ВМР	EMP	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	MILES
329-B1	0	0.244	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.2440
329-B1	0.244	0.408	OPEN-HWY LEGAL	01-STO	DECOM	DECOM	0.1600
329-C1	0	1.166	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	1.1660
329-C2	0	0.0687	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.0687
329-D1	0	1.126	09-RES	09-RES	11-RES	09-RES	1.1259
329-E1	0	1.716	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	1.7160
329-G1	0	1.683	09-RES	09-RES	11-RES	09-RES	1.6830
329-G1	1.683	1.915	09-RES	09-RES	11-RES	DECOM	0.2300
329-G2	0	0.227	09-RES	01-STO	DECOM	DECOM	0.2268
329-H1	0	0.0528	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.0528
329-I1	0	0.046	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.0460
329-J1	0	0.154	OPEN-HWY LEGAL	NM	NM	OPEN-HWY LEGAL	0.1540
329-J1	0.154	0.247	OPEN-HWY LEGAL	NM	NM	NM	0.0930
329-J1	0.247	0.452	NATURAL RECLAIMED	NATURAL RECLAIMED	DECOM	DECOM	0.2050
329-J2	0	0.454	NATURAL RECLAIMED	NATURAL RECLAIMED	DECOM	DECOM	0.4539
329-J3	0	0.146	NATURAL RECLAIMED	NATURAL RECLAIMED	DECOM	DECOM	0.1458
329-J4	0	0.0653	NATURAL RECLAIMED	NATURAL RECLAIMED	DECOM	DECOM	0.0653
329-K1	0	0.189	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.1890
329-K1	0.189	0.863	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.6737
329-K2	0	0.05	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.0498
329-K3	0	0.111	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1108
329-L1	0	0.106	01-RES	01-RES	01-RES	OPEN-HWY LEGAL	0.1055
329-L2	0	0.081	01-RES	01-RES	01-RES	OPEN-HWY LEGAL	0.0806
329-M1	0	0.899	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	0.8990

ID	ВМР	EMP	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	MILES
329-N1	0	0.244	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.2438
330-001	0	0.08	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.0800
330-A1	0	0.106	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.1060
330-A1	0.106	2.401	06-RES	06-RES	06-RES	06-RES	2.2950
330-B1	0	3.976	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	06-RES	3.9760
330-B1	3.976	6.808	01-RES	01-RES	01-RES	06-RES	2.8320
330-C1	0	1.126	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	1.1260
330-C1	1.126	1.607	06-RES	06-RES	06-RES	06-RES	0.4810
330-C2	0	0.1472	06-RES	06-RES	06-RES	06-RES	0.1472
330-C3	0	0.353	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.3530
330-D1	0	0.063	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.0630
330-E1	0	0.074	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.0740
330-F1	0	0.127	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.1265
330-G1	0	0.093	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.0925
330-H1	0	0.02	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.0200
330-H1	0.	0.433	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.4100
330-H2	0	0.138	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.1380
330-I1	0	0.102	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.1020
4043-B1	0	0.837	12-RES	12-RES	12-RES	09-RES	0.8370
4043-C1	0	0.928	12-RES	01-STO	01-STO	01-STO	0.9280
4043-D1	0	1.166	12-RES	01-STO	01-STO	01-STO	1.1660

ID	ВМР	EMP	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	MILES
4043-E1	0	0.7742	12-RES	01-STO	01-STO	01-STO	0.7742
4043-F1	0	0.165	12-RES	12-RES	M-08.00	M-08.105	0.1650
4043-F1	0.165	0.768	12-RES	M-07.00	M-08.00	M-08.105	0.6028
4043-G1	0	0.892	12-RES	01-STO	01-STO	01-STO	0.8920
4043-G2	0	0.075	12-RES	01-STO	01-STO	01-STO	0.0750
4047-A1	0	2.313	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	2.3130
4047-B1	0	0.824	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	0.8238
4047-C1	0	0.202	01-RES	01-RES-STO	01-RES-STO	01-RES-STO	0.2020
4047-C2	0	0.382	01-RES	01-RES-STO	01-RES-STO	01-RES-STO	0.3820
4047-D1	0	0.643	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	0.6425
4050-A1	0	0.042	DC	DC	DC	DC	0.0420
4050-A2	0	0.472	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	0.4720

ID	ВМР	EMP	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	MILES
4080-A1	0	0.326	01-RES	DECOM	DECOM	DECOM	0.3260
4080-B1	0	0.624	01-RES	DECOM	DECOM	DECOM	0.6240
4081-001	0	0.183	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.1830
4081-A1	0	0.687	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.6870
4081-A1	0.687	2.208	01-RES	DECOM	DECOM	DECOM	1.5209
4081-	0	0.374	P-ALT3	P-ALT3	ROAD RECONSTRUCTION	ROAD RECONSTRUCTION	0.3740
4081-	0	0.083	P-ALT3	P-ALT3	ROAD RECONSTRUCTION	ROAD RECONSTRUCTION	0.0830
4081-	0	0.053	P-ALT3	P-ALT3	ROAD RECONSTRUCTION	ROAD RECONSTRUCTION	0.0531
4082-Ā1	0	0.291	OPEN-HWY LEGAL	01-STO	DECOM	DECOM	0.2910
4082-D1	0	0.12	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.1200
4082-E1	0	0.036	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.0360
4082-E1	0.036	0.202	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.1658
4082-F1	0	0.024	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.0240
4082-F1	0.024	0.129	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.1050
4082-F1	0.129	0.375	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.2460
4082-F1	0.375	0.748	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.3730
4082-G1	0	0.242	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.2420
4082-G1	0.242	0.686	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.4441
4082-H1	0	1.602	OPEN-HWY LEGAL	M-07.00	M-08.00	M-08.105	1.6020
4082-H2	0	0.423	OPEN-HWY LEGAL	M-07.00	DECOM	DECOM	0.4230
4082-I1	0	0.707	OPEN-HWY LEGAL	M-07.00	M-08.00	M-08.105	0.7070
4082-I1	0.707	1.011	OPEN-HWY LEGAL	01-STO	DECOM	DECOM	0.3040
4082-I2	0	0.378	OPEN-HWY LEGAL	M-07.00	M-08.00	M-08.105	0.3780
4082-J1	0	0.542	OPEN-HWY LEGAL	01-STO	DECOM	DECOM	0.5419
4082-J2	0	0.511	OPEN-HWY LEGAL	01-STO	DECOM	DECOM	0.5110
4082-J3	0	0.198	OPEN-HWY LEGAL	01-STO	DECOM	DECOM	0.1979
4082-K1	0	0.062	OPEN-HWY LEGAL	01-STO	DECOM	DECOM	0.0620
4083-A1	0	2.0078	NATURAL RECLAIMED	NATURAL RECLAIMED	DECOM	DECOM	2.0078
4083-A2	0	1.0432	NATURAL RECLAIMED	NATURAL RECLAIMED	DECOM	DECOM	1.0432
4083-A3	0	0.1577	NATURAL RECLAIMED	NATURAL RECLAIMED	DECOM	DECOM	0.1577
4083-A4	0	0.1334	NATURAL RECLAIMED	NATURAL RECLAIMED	DECOM	DECOM	0.1334
4083-A5	0	0.1472	NATURAL RECLAIMED	NATURAL RECLAIMED	DECOM	DECOM	0.1472
4083-A6	0	0.1334	NATURAL RECLAIMED	NATURAL RECLAIMED	DECOM	DECOM	0.1334

ID	ВМР	EMP	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	MILES
4083-A7	0	0.7815	NATURAL RECLAIMED	NATURAL RECLAIMED	DECOM	DECOM	0.781
4083-A8	0	0.258	NATURAL RECLAIMED	NATURAL RECLAIMED	DECOM	DECOM	0.257
4083-A9	0	0.6608	NATURAL RECLAIMED	NATURAL RECLAIMED	DECOM	DECOM	0.660
4083-B1	0	0.305	NATURAL RECLAIMED	NATURAL RECLAIMED	DECOM	DECOM	0.304
4083-C1	0	0.095	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.095
4083-C1	0.095	0.249	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.154
4083-C1	0.249	0.456	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.206
4083-C2	0	0.226	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.226
4083-C3	0	0.123	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.123
4083-C3	0.123	0.214	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.091
4083-D1	0	0.236	NATURAL RECLAIMED	NATURAL RECLAIMED	DECOM	DECOM	0.236
4084-A1	0	0.767	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	0.767
4084-A2	0	0.336	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.336
4084-A3	0	0.133	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.133
4085-A1	0	0.334	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	0.334
4085-A2	0	0.043	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	0.043
4085-A2	0.043	0.157	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.114
4085-A2	0.157	0.281	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	0.124
4085-A3	0	0.39	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	0.390
4085-A3	0.3	0.781	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.390
4086-A1	0	0.436	OPEN-HWY LEGAL	01-STO	DECOM	DECOM	0.435
4086-B1	0	0.923	OPEN-HWY LEGAL	M-07.00	M-08.00	M-08.105	0.922
4086-B2	0	0.531	OPEN-HWY LEGAL	01-STO	DECOM	DECOM	0.530
4086-B3	0	0.276	OPEN-HWY LEGAL	M-07.00	M-08.00	M-08.105	0.276
4086-B4	0	0.069	OPEN-HWY LEGAL	M-07.00	M-08.00	M-08.105	0.069
4086-B5	0	0.253	OPEN-HWY LEGAL	M-07.00	M-08.00	M-08.105	0.253
4087-A1	0	0.271	06-RES	06-RES	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.271
4087-A1	0.271	0.63	06-RES	06-RES	06-RES	06-RES	0.359
4087-A1	0.6	1.076	06-RES	06-RES	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.446
4087-A1	1.076	2.003	06-RES	06-RES	06-RES	06-RES	0.926
4087-A2	0	0.201	06-RES	06-RES	06-RES	06-RES	0.201
4087-B1	0	1.896	06-RES	06-RES	DECOM	DECOM	1.896
4087-B2	0	0.82	06-RES	06-RES	DECOM	DECOM	0.820
4087-C1	0	0.275	06-RES	06-RES	DECOM	DECOM	0.275
4087-D1	0	0.34	06-RES	06-RES	06-RES	06-RES	0.340

ID	ВМР	EMP	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	MILES
4087-E1	0	0.2771	06-RES	06-RES	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.277
4087-E2	0	0.104	06-RES	06-RES	06-RES	06-RES	0.103
4087-F1	0	0.047	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.047
4087-F1	0.047	0.163	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.116
4087-F1	0.163	0.2	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.036
4087-G1	0	0.089	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.089
4087-H1	0	0.05	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.050
4087-I1	0	0.074	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.074
4087-J1	0	0.039	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.039
4087-J1	0.039	0.075	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.035

ID	BMP	EMP	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	MILES
4087-K1	0	0.0	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.020
4087-K1	0.02	0.21	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.197
4087-K1	0.217	0.34	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.129
4087-L1	0	0.26	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.263
4087-L1	0.263	0.74	OPEN-HWY LEGAL	OPEN-HWY LEGAL	DECOM	DECOM	0.482
4088-A1	0	0.53	NATURAL RECLAIMED	NATURAL RECLAIMED	DECOM	DECOM	0.537
4088-A2	0	0.3212	NATURAL RECLAIMED	NATURAL RECLAIMED	DECOM	DECOM	0.321
4090-A1	0	0.22	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.228
4090-A1	0.228	1.16	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	0.933
4090-B1	0	0.67	OPEN-HWY LEGAL	01-STO	DECOM	DECOM	0.673
4090-C1	0	0.52	OPEN-HWY LEGAL	M-07.00	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.525
4090-D1	0	0.21	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	0.214
4090-E1	0	0.02	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	0.026
4090-F1	0	0.62	OPEN-HWY LEGAL	01-STO	M-08.00	M-08.105	0.629
4090-G1	0	0.78	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	0.785
4106-001	0	0.26	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.269
4106-002	0	0.75	UC-M-07.00	M-07.00	M-08.00	M-08.105	0.755
4106-003	0	0.45	UC-CLOSED	01-RES	DECOM	DECOM	0.455
4106-004	0	0.07	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.076
4106-A1	0	1.10	NATURAL RECLAIMED	NATURAL RECLAIMED	DECOM	DECOM	1.107
4106-B1	0	0.54	06-RES	06-RES	06-RES	06-RES	0.541
4106-C1	0	1.0381	06-RES	06-RES	06-RES	06-RES	1.038

ID	BMP	EMP	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	<b>ALTERNATIVE 4</b>	MILES
4106-D1	0	0.	06-RES	06-RES	06-RES	06-RES	0.700
4106-D1	0.7	1.5	06-RES	06-RES	06-RES	06-RES	0.880
4106-E1	0	0.17	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.179
4106-E1	0.179	1.12	01-RES	01-RES-STO	01-RES-STO	01-RES-STO	0.948
4106-H1	0	0.5688	01-RES	NM	NM	01-RES-STO	0.568
4106-H2	0	0.72	01-RES	01-RES-STO	01-RES-STO	01-RES-STO	0.723
4106-H3	0	0.37	01-RES	NM	NM	01-RES-STO	0.378
4106-J1	0	0.13	01-RES	OPEN-HWY LEGAL	01-RES	06-RES	0.134
4106-J1	0.134	2.34	01-RES	01-RES-STO	DECOM	DECOM	2.211
4106-J2	0	2.79	01-RES	OPEN-HWY LEGAL	01-RES	06-RES	2.796
4106-J3	0	0.44	01-RES	01-RES-STO	DECOM	DECOM	0.443
4106-K1	0	0.28	06-RES	06-RES	06-RES	06-RES	0.283
4106-L1	0	0.1	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.159
4106-M1	0	0.44	OPEN-HWY LEGAL	OPEN-HWY LEGAL	DECOM	DECOM	0.442
4106-N1	0	0.43	NATURAL RECLAIMED	NATURAL RECLAIMED	DECOM	DECOM	0.432
4106-O1	0	0.20	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.206
4108-001	0	0.09	UC-OPEN	OPEN-HWY LEGAL	DECOM	DECOM	0.098
4108-B1	0	0.03	NATURAL RECLAIMED	NATURAL RECLAIMED	DECOM	DECOM	0.039
4108-B1	0.039	1.09	NATURAL RECLAIMED	NATURAL RECLAIMED	DECOM	DECOM	1.060
4108-D1	0	0.70	NATURAL RECLAIMED	NATURAL RECLAIMED	DECOM	DECOM	0.705
4113-A1	0	0.10	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.105
4113-A1	0.105	1.92	10-RES	10-RES	DECOM	DECOM	1.820
4113-A3	0	0.61	NATURAL RECLAIMED	01-STO	DECOM	DECOM	0.616

ID	ВМР	EMP	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	MILES
4113-A4	0	0.393	NATURAL RECLAIMED	01-STO	DECOM	DECOM	0.3929
4113-B1	0	0.566	10-RES	01-STO	DECOM	DECOM	0.5660
4113-B1	0.566	1.217	NATURAL RECLAIMED	01-STO	DECOM	DECOM	0.6510
4113-C1	0	0.162	10-RES	01-STO	01-STO	01-STO	0.1620
4133-A1	0	0.975	OPEN-HWY LEGAL	OPEN-HWY LEGAL	01-RES	01-STO	0.9748
4134-A1	0	0.364	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.3640
4134-B1	0	0.343	OPEN-HWY LEGAL	01-STO	01-STO	DECOM	0.3430
4134-B2	0	0.12	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	DECOM	0.1199
4135-B1	0	0.356	09-RES	01-STO	DECOM	DECOM	0.3560
417-NEW-	0	0.23	P-ALT4	P-ALT4	P-ALT4	MT RECONSTRUCTION	0.2300

ID	ВМР	EMP	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	MILES
417-NEW-	0	0.389	P-ALT4	P-ALT4	P-ALT4	MT RECONSTRUCTION	0.3890
417-NEW-	0	0.349	P-ALT4	P-ALT4	P-ALT4	MT RECONSTRUCTION	0.3490
417-NEW-	0	0.872	P-ALT4	P-ALT4	P-ALT4	MT RECONSTRUCTION	0.8720
417-NEW-	0	1.281	P-ALT4	P-ALT4	P-ALT4	MT RECONSTRUCTION	1.2810
4195-001	0	0.359	UC-OPEN	09-RES	11-RES	09-RES	0.3590
4195-A1	0	0.623	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.6230
4195-A2	0	0.139	01-RES	01-RES	DECOM	DECOM	0.1390
4195-A3	0	0.535	OPEN-HWY LEGAL	OPEN-HWY LEGAL	01-STO	01-STO	0.5345
440-NEW-	0	0.151	P-ALT4	P-ALT4	P-ALT4	NM RECONSTRUCTION	0.1510
440-NEW-	0	0.609	P-ALT4	P-ALT4	P-ALT4	NM RECONSTRUCTION	0.6090
440-NEW-	0	2.112	P-ALT4	P-ALT4	P-ALT4	NM RECONSTRUCTION	2.1120
467-NEW-	0	0.372	P-ALT4	P-ALT4	P-ALT4	MT RECONSTRUCTION	0.3720
467-NEW-	0	1.084	P-ALT4	P-ALT4	P-ALT4	MT RECONSTRUCTION	1.0840
467-NEW-	0	0.978	P-ALT4	P-ALT4	P-ALT4	MT RECONSTRUCTION	0.9780
467-NEW-	0	0.856	P-ALT4	P-ALT4	P-ALT4	MT RECONSTRUCTION	0.8560
467-NEW-	0	0.292	P-ALT4	P-ALT4	P-ALT4	MT RECONSTRUCTION	0.2920
467-NEW-	0	0.702	P-ALT4	P-ALT4	P-ALT4	MT RECONSTRUCTION	0.7020
467-NEW-	0	0.226	P-ALT4	P-ALT4	P-ALT4	MT RECONSTRUCTION	0.2260
467-NEW-	0	0.899	P-ALT4	P-ALT4	P-ALT4	MT RECONSTRUCTION	0.8990
485-001	0	0.107	UC-OPEN	OPEN-HWY LEGAL	DECOM	DECOM	0.1070
485-A1	0	2.386	DC	DC	DC	DC	2.3860
485-B1	0	2.148	09-RES	09-RES	11-RES	09-RES	2.1480
485-B2	0	0.63	DC	DC	DC	DC	0.6300
485-C1	0	0.671	09-RES	01-STO	01-STO	DECOM	0.6710
485-C2	0	0.459	09-RES	01-STO	01-STO	DECOM	0.4590
485-D1	0	0.34	OPEN-HWY LEGAL	CDNST	CDNST	OPEN-HWY LEGAL	0.3400
485-D1	0	1.221	OPEN-HWY LEGAL	CDNST	CDNST	CDNST	0.8810
485-G1	0	1.034	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	DECOM	1.0340
485-H1	0	0.374	09-RES	01-STO	01-STO	01-STO	0.3740
485-H3	0	0.225	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.2250
485-H3	0.225	0.33	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1050
485-H3	0	0.542	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.2120
485-H3	0.542	0.655	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1128
485-H4	0	0.588	09-RES	01-STO	01-STO	01-STO	0.5880
485-H5	0	0.392	09-RES	01-STO	01-STO	01-STO	0.3920

ID	BMP	EMP	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	MILES
485-I1	0	0.185	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.1850
485-J1	0	0.342	09-RES	01-STO	01-STO	01-STO	0.3420
601-001	0	0.167	UC-OPEN	OPEN-HWY LEGAL	DECOM	DECOM	0.1670
601-001	0.167	0.778	UC-OPEN	OPEN-HWY LEGAL	DECOM	M-07.00	0.6010
601-002	0	0.342	UC-OPEN	OPEN-HWY LEGAL	DECOM	M-07.00	0.3420
601-A1	0	0.2982	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.2981
601-A2	0	0.318	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.3180
601-B1	0	0.153	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.1525
601-D1	0	0.807	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.8069
601-E1	0	1.775	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	1.7750
601-E1	1.775	2.044	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.2685
601-F1	0	0.257	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	0.2570
601-G1	0	0.146	NATURAL RECLAIMED	NATURAL RECLAIMED	DECOM	DECOM	0.1460
601-H2	0	0.08	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.0800
601-J1	0	0.228	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.2277
601-K1	0	0.209	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	0.2090
601-K2	0	1.076	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	1.0756
601-K3	0	0.272	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	0.2716
601-K4	0	0.497	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	0.4966
601-L1	0	0.024	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.0240
601-L1	0.024	0.793	OPEN-HWY LEGAL	01-STO	01-STO	DECOM	0.7690
601-L2	0	0.46	OPEN-HWY LEGAL	01-STO	01-STO	DECOM	0.4596
601-L3	0	0.341	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.3410
601-L3	0.341	0.937	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	0.5958
601-L4	0	0.11	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	0.1100
601-M1	0	0.408	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	0.4080
601-M2	0	0.125	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	0.1250
601-N1	0	0.555	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.5550
601-N1	0.555	0.699	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1440
601-N1	0.699	1.238	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.5390
601-N1	1.238	1.499	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.2610
601-N1	1.499	2.057	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.5580
601-N1	2.057	2.208	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1506
601-N2	0	0.405	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	0.4050
601-N3	0	0.242	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.2420

ID	ВМР	EMP	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	MILES
601-N3	0.242	0.306	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.0638
601-N4	0	0.196	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.1960
601-N5	0	0.59	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	0.5900
601-N6	0	0.185	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	0.1850
601-P1	0	0.202	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.2017
607-A1	0	1.355	01-RES	01-RES-STO	01-RES-STO	01-RES-STO	1.3550
607-C1	0	1.208	01-RES	NM	NM	NM	1.2080
607-C1	1.208	1.285	01-RES	01-RES-STO	01-RES-STO	01-RES-STO	0.0767
607-C2	0	0.102	01-RES	01-RES-STO	01-RES-STO	01-RES-STO	0.1021
607-D1	0	0.3	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.3000

ID	ВМР	EMP	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	MILES
607-D1	0	0.795	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	0.4950
607-D2	0	0.039	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.0390
607-E1	0	0.779	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.7791
607-F1	0	1.5125	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	1.5125
607-F2	0	1	01-RES	01-RES-STO	01-RES-STO	01-RES-STO	1.0000
607-F2	1	1.124	01-RES	01-RES-STO	01-RES-STO	01-RES-STO	0.1240
607-G1	0	0.405	01-RES	01-RES-STO	01-RES-STO	01-RES-STO	0.4050
607-H1	0	0.341	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.3410
607-H1	0.341	1.133	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	DECOM	0.7920
607-H1	1.133	1.395	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.2200
626-A1	0	0.153	OPEN-HWY LEGAL	OPEN-HWY LEGAL	M-08.00	M-08.105	0.1530
626-A1	0.153	1.375	09-RES	09-RES	M-08.00	M-08.105	1.2220
626-B1	0	0.924	OPEN-HWY LEGAL	OPEN-HWY LEGAL	M-08.00	M-08.105	0.9236
626-C1	0	0.247	OPEN-HWY LEGAL	OPEN-HWY LEGAL	M-08.00	M-08.105	0.2470
626-C2	0	0.384	OPEN-HWY LEGAL	01-STO	01-STO	01-STO	0.3838
626-D1	0	0.279	NATURAL RECLAIMED	NATURAL RECLAIMED	DECOM	DECOM	0.2786
771-A1	0	1	DC	DC	DC	DC	1.0000
771-A1	1	1.554	DC	DC	DC	DC	0.5540
771-A1	1.554	3.266	11-RES	11-RES	11-RES	11-RES	1.7120
771-A1	3.266	3.414	11-RES	11-RES	DECOM	DECOM	0.1480
771-A1	3.414	3.521	11-RES	11-RES	NM	NM	0.1071
771-A2	0	0.282	11-RES	11-RES	DECOM	DECOM	0.2820

ID	ВМР	EMP	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	MILES
771-A2	0.282	1.284	DC	DC	DC	DC	1.0020
771-A3	0	0.642	11-RES	NM	NM	NM	0.6416
771-B1	0	3.478	06-RES	06-RES	06-RES	06-RES	3.4781
8963-A1	0	0.313	01-RES	01-RES-STO	DECOM	DECOM	0.3130
8964-A1	0	0.252	01-RES	01-RES-STO	DECOM	DECOM	0.2515
COOPER'S							
LAKE	0	8.075	15	15	15	15	8.0747
ROAD							
HIGHWAY	0	32.489	14	14	14	14	32.485
PVT-1015	0	0.584	STATE-CLOSED	STATE-CLOSED	STATE-CLOSED	STATE-CLOSED	0.5557
PVT-1018	0	0.206	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.2060
PVT-1078	0	0.191	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1910
PVT-1084	0	0.46	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.4600
PVT-1102	0	0.4588	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.4588
PVT-1103	0	0.1137	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1137
PVT-1104	0	1.069	NO-ROW	NO-ROW	NO-ROW	NO-ROW	1.0688
PVT-1105	0	0.1245	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1245
PVT-1106	0	1.995	NO-ROW	NO-ROW	NO-ROW	NO-ROW	1.9950
PVT-1107	0	0.5104	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.5104
PVT-1108	0	0.187	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1869
PVT-1109	0	0.902	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.9016
PVT-1110	0	0.2648	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.2648
PVT-1111	0	0.1293	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1293
PVT-1112	0	0.5564	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.5564
PVT-1129	0	0.874	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.8735

ID	ВМР	EMP	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	MILES
PVT-1130	0	0.379	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.3787
PVT-1131	0	0.117	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1166
PVT-1132	0	2.552	NO-ROW	NO-ROW	NO-ROW	NO-ROW	1.9210
PVT-1133	0	0.093	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.0927
PVT-1138	0	1.713	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.2826
PVT-1142	0	0.11	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1099
PVT-1411	0	0.132	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1317

ID	ВМР	EMP	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	MILES
PVT-3000	0	1.089	NO-ROW	NO-ROW	NO-ROW	NO-ROW	1.0889
PVT-3001	0	0.768	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.7680
PVT-3002	0	0.277	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.2769
PVT-3003	0	0.232	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.2318
PVT-3004	0	0.084	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.0840
PVT-3005	0	0.315	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.3146
PVT-3006	0	0.087	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.0869
PVT-3007	0	0.075	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.0750
PVT-3008	0	0.05	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.0498
PVT-3009	0	0.073	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.0726
PVT-3010	0	0.429	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.4291
PVT-3011	0	0.568	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.5680
PVT-3012	0	0.581	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.5807
PVT-3013	0	1.226	NO-ROW	NO-ROW	NO-ROW	NO-ROW	1.2260
PVT-401	0	0.199	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1990
PVT-402	0	0.397	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.3970
PVT-403	0	0.417	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.4168
PVT-404	0	0.411	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.4108
PVT-405	0	0.147	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1466
PVT-406	0	0.198	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1980
PVT-407	0	0.252	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.2520
PVT-408	0	0.222	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.2220
PVT-409	0	0.256	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.2560
PVT-410	0	0.104	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1040
PVT-411	0	0.135	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1345
PVT-412	0	0.525	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.5250
PVT-413	0	0.4603	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.4603
PVT-414	0	0.434	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.4340
PVT-415	0	0.239	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.2390
PVT-416	0	0.653	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.6527
PVT-417	0	0.289	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.2888
PVT-418	0	0.043	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.0430
PVT-419	0	0.296	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.2957
PVT-420	0	0.271	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.2708
PVT-421	0	0.128	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1277

**ALTERNATIVE 4** 

**MILES** 

**ALTERNATIVE 3** 

PVT-422	0	0.064	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.0638
PVT-423	0	0.722	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.7221
PVT-424	0	0.398	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.3977
ID	ВМР	EMP	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	MILES
PVT-425	0	0.507	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.5070
PVT-426	0	2.652	NO-ROW	NO-ROW	NO-ROW	NO-ROW	2.6519
PVT-427	0	0.112	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1116
PVT-428	0	0.999	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.9985
PVT-429	0	0.388	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.3876
PVT-430	0	0.122	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1220
PVT-431	0	0.222	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.2220
PVT-432	0	0.126	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1260
PVT-433	0	0.294	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.2940
PVT-434	0	0.251	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.2506
PVT-435	0	0.142	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1420
PVT-436	0	0.204	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.2038
PVT-437	0	0.09	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.0900
PVT-438	0	0.169	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1691
PVT-439	0	1.1592	NO-ROW	NO-ROW	NO-ROW	NO-ROW	1.1592
PVT-440	0	0.648	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.6480
PVT-441	0	0.363	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.3626
PVT-442	0	0.437	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.4370
PVT-443	0	0.23	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.2300
PVT-444	0	0.155	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1550
PVT-445	0	1.24	NO-ROW	NO-ROW	NO-ROW	NO-ROW	1.2399
PVT-446	0	0.369	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.3689
PVT-447	0	0.222	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.2220
PVT-448	0	0.329	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.3290
PVT-449	0	0.265	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.2650
PVT-450	0	1.621	NO-ROW	NO-ROW	NO-ROW	NO-ROW	1.6210
PVT-451	0	0.734	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.7338
PVT-452	0	0.1	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1001
PVT-453	0	0.076	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.0755
PVT-454	0	0.111	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1111

**ALTERNATIVE 2** 

ID

BMP

EMP

**ALTERNATIVE 1** 

ID	ВМР	EMP	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	MILES
PVT-455	0	0.249	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.2490
PVT-456	0	0.187	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1870
PVT-457	0	0.047	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.0467
PVT-458	0	0.096	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.0961
PVT-459	0	0.091	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.0907
PVT-460	0	0.299	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.2989
PVT-461	0	0.3156	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.3156
PVT-462	0	0.772	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.7719
PVT-463	0	1.692	NO-ROW	NO-ROW	NO-ROW	NO-ROW	1.6920
PVT-464	0	0.11	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1097
PVT-465	0	1.77	NO-ROW	NO-ROW	NO-ROW	NO-ROW	1.7701
PVT-466	0	0.316	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.3160
PVT-467	0	0.779	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.7787
PVT-468	0	0.127	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1265
PVT-469	0	0.113	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1130

ID	ВМР	EMP	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	MILES
PVT-470	0	0.611	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.6110
PVT-472	0	1.06	NO-ROW	NO-ROW	NO-ROW	NO-ROW	1.0568
PVT-473	0	0.149	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1488
PVT-474	0	0.051	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.0510
PVT-475	0	0.346	STATE-CLOSED	STATE-CLOSED	STATE-CLOSED	STATE-CLOSED	0.3460
PVT-476	0	0.744	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.7437
PVT-482	0	0.123	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.1230
U-001	0	0.633	OPEN-LX	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.6330
U-001	0.633	2.53	OPEN-LX	OPEN-HWY LEGAL	DECOM	DECOM	1.8969
U-001	2.5	3.038	OPEN-LX	01-STO	DECOM	DECOM	0.5081
U-002	0	0.434	OPEN-LX	01-STO	DECOM	DECOM	0.4338
U-003	0	0.631	OPEN-LX	01-STO	DECOM	DECOM	0.6305
U-004	0	0.171	OPEN-LX	01-STO	DECOM	DECOM	0.1710
U-005	0	1.144	OPEN-LX	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	1.1439
U-006	0	0.483	OPEN-LX	01-STO	DECOM	DECOM	0.4830
U-008	0	0.235	OPEN-LX	01-STO	DECOM	DECOM	0.2350
U-009	0	0.632	OPEN-LX	01-STO	DECOM	DECOM	0.6317
U-010	0	1.11	OPEN-LX	01-STO	DECOM	DECOM	1.1098

ID	ВМР	EMP	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	<b>ALTERNATIVE 4</b>	MILES
U-011	0	0.22	OPEN-LX	01-STO	DECOM	DECOM	0.2200
U-011	0.2	0.385	OPEN-LX	01-STO	DECOM	DECOM	0.1650
U-012	0	0.848	OPEN-LX	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.8480
U-012	0.848	1.479	OPEN-LX	01-STO	DECOM	DECOM	0.6310
U-013	0	0.554	OPEN-LX	OPEN-HWY LEGAL	DECOM	DECOM	0.5535
U-014	0	0.098	OPEN-LX	01-STO	DECOM	DECOM	0.0980
U-015	0	1.469	CLOSED-LX	M-08.00	M-08.00	M-08.00	1.4687
U-015	1.469	1.588	CLOSED-LX	01-STO	DECOM	DECOM	0.1185
U-017	0	0.818	OPEN-LX	01-STO	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.8180
U-018	0	0.691	CLOSED-LX	M-08.00	01-RES	06-RES	0.6908
U-020	0	4.977	CLOSED-LX	M-08.00	M-08.00	M-08.00	4.9737
U-021	0	1.125	CLOSED-LX	M-08.00	01-RES	06-RES	1.1246
U-023	0	1.114	CLOSED-LX	01-STO	DECOM	DECOM	1.1140
U-024	0	1.156	CLOSED-LX	01-STO	DECOM	DECOM	1.1560
U-026	0	0.537	CLOSED-LX	M-08.00	01-RES	06-RES	0.5369
U-027	0	1.417	CLOSED-LX	M-08.00	M-08.00	M-08.00	1.4170
U-027	1.417	3.096	CLOSED-LX	M-08.00	DECOM	DECOM	1.6790
U-028	0	1.262	CLOSED-LX	01-STO	DECOM	DECOM	1.2620
U-028	1.262	1.665	CLOSED-LX	M-08.00	M-08.00	M-08.00	0.4030
U-028	1.665	3.344	CLOSED-LX	01-STO	DECOM	DECOM	1.6790
U-028	3.344	3.785	CLOSED-LX	M-08.00	DECOM	DECOM	0.4410
U-028	3.785	4.6	CLOSED-LX	01-STO	DECOM	DECOM	0.8150
U-029	0	0.274	CLOSED-LX	01-STO	DECOM	DECOM	0.2741
U-030	0	0.579	CLOSED-LX	01-STO	DECOM	DECOM	0.5790
U-030	0.579	1.676	CLOSED-LX	01-STO	DECOM	DECOM	1.0966
U-031	0	0.867	CLOSED-LX	M-08.00	M-08.00	OPEN-HWY LEGAL	0.8670
U-031	0.867	3.849	CLOSED-LX	M-08.00	DECOM	DECOM	2.9820

ID	ВМР	ЕМР	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	MILES
U-032	0	0.954	CLOSED-LX	01-STO	DECOM	DECOM	0.9540
U-032	0.954	1.047	CLOSED-LX	01-STO	DECOM	DECOM	0.0928
U-033	0	0.25	CLOSED-LX	01-STO	DECOM	DECOM	0.2498
U-034	0	1.152	CLOSED-LX	M-08.00	M-08.00	M-08.00	1.1518
U-035	0	1.505	CLOSED-LX	M-08.00	M-08.00	M-08.00	1.5051

		EMP	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	MILES
U-035	1.505	2.27	CLOSED-LX	M-08.00	DECOM	M-08.00	0.7649
U-036	0	1.816	CLOSED-LX	01-STO	DECOM	DECOM	1.8160
U-037	0	0.548	CLOSED-LX	01-STO	DECOM	DECOM	0.5478
U-038	0	3.53	CLOSED-LX	M-08.00	DECOM	DECOM	3.5300
U-038	3.5	5.21	CLOSED-LX	01-STO	DECOM	DECOM	1.6797
U-039	0	1.024	CLOSED-LX	01-STO	DECOM	DECOM	1.0240
U-039	1.024	1.255	CLOSED-LX	01-STO	DECOM	DECOM	0.2310
U-040	0	1.112	CLOSED-LX	01-STO	DECOM	DECOM	1.1120
U-041	0	0.306	CLOSED-LX	01-STO	DECOM	DECOM	0.3060
U-042	0	0.422	CLOSED-LX	01-STO	DECOM	DECOM	0.4220
U-043	0	0.68	CLOSED-LX	01-STO	DECOM	DECOM	0.6800
U-043	0.6	1.044	CLOSED-LX	01-STO	DECOM	DECOM	0.3638
U-044	0	1.146	CLOSED-LX	01-STO	06-RES	06-RES	1.1460
U-044	1.146	2.02	CLOSED-LX	01-STO	DECOM	DECOM	0.8740
U-045	0	0.791	CLOSED-LX	01-STO	DECOM	DECOM	0.7940
U-045	0.791	1.139	CLOSED-LX	01-STO	DECOM	DECOM	0.3712
U-046	0	0.368	CLOSED-LX	01-STO	DECOM	DECOM	0.3678
U-047	0	0.557	CLOSED-LX	01-STO	DECOM	DECOM	0.5570
U-049	0	0.777	UC-CLOSED	01-RES	DECOM	DECOM	0.7770
U-049	0.777	0.837	UC-CLOSED	01-RES	DECOM	DECOM	0.0600
U-049	0.837	1.878	UC-CLOSED	01-RES	DECOM	DECOM	1.0409
U-050	0	0.451	UC-CLOSED	01-RES	DECOM	DECOM	0.4510
U-050	0.451	0.614	UC-CLOSED	01-RES	DECOM	DECOM	0.1626
U-051	0	2.978	UC-CLOSED	01-RES	DECOM	DECOM	2.9778
U-052	0	1.064	UC-CLOSED	01-RES	DECOM	DECOM	1.0640
U-053	0	0.472	UC-CLOSED	01-RES	DECOM	DECOM	0.4720
U-054	0	0.5064	UC-CLOSED	01-RES	DECOM	DECOM	0.5064
U-055	0	0.299	UC-CLOSED	01-RES	DECOM	DECOM	0.2990
U-056	0	0.136	UC-OPEN	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.1358
U-057	0	0.143	UC-OPEN	OPEN-HWY LEGAL	DECOM	DECOM	0.1431
U-060	0	1.618	CLOSED-LX	01-RES	DECOM	DECOM	1.6179
U-061	0	0.35	CLOSED-LX	01-RES	DECOM	DECOM	0.3500
U-062	0	0.307	CLOSED-LX	01-RES	DECOM	DECOM	0.3071
U-063	0	0.067	CLOSED-LX	01-RES	DECOM	DECOM	0.0670
U-064	0	0.3248	CLOSED-LX	01-RES	DECOM	DECOM	0.3247

ID	ВМР	EMP	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	MILES
U-065	0	0.533	CLOSED-LX	01-RES	DECOM	DECOM	0.5329
U-066	0	2.172	CLOSED-LX	01-STO	01-RES	06-RES	2.1720
U-066	2.172	3.778	CLOSED-LX	01-RES	01-RES	06-RES	1.6056
U-067	0	2.669	CLOSED-LX	01-RES	01-RES	06-RES	2.6688
U-068	0	0.839	CLOSED-LX	01-RES	01-RES	06-RES	0.8390

ID	ВМР	EMP	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	MILES
U-069	0	0.201	CLOSED-LX	01-STO	01-STO	01-STO	0.2010
U-069	0.201	1.583	CLOSED-LX	01-RES	01-RES	06-RES	1.3820
U-070	0	0.455	CLOSED-LX	01-STO	01-STO	01-STO	0.4549
U-071	0	0.14	CLOSED-LX	01-STO	01-STO	01-STO	0.1400
U-072	0	0.123	CLOSED-LX	01-STO	01-STO	01-STO	0.1230
U-073	0	0.491	CLOSED-LX	01-RES	01-RES	06-RES	0.4910
U-073	0.491	0.943	CLOSED-LX	01-STO	01-STO	01-STO	0.4516
U-074	0	0.142	CLOSED-LX	01-RES	01-RES	06-RES	0.1420
U-075	0	0.304	CLOSED-LX	01-RES	01-RES	06-RES	0.3031
U-089	0	0.482	CLOSED-LX	01-RES	DECOM	DECOM	0.4819
U-090	0	1.852	CLOSED-LX	01-RES	DECOM	DECOM	1.8520
U-091	0	0.358	CLOSED-LX	01-RES	DECOM	DECOM	0.3580
U-092	0	0.947	OPEN-LX	OPEN-HWY LEGAL	01-RES	06-RES	0.9470
U-093	0	0.148	OPEN-LX	OPEN-HWY LEGAL	01-RES	06-RES	0.1480
U-094	0	0.2628	OPEN-LX	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.2628
U-095	0	0.197	OPEN-LX	OPEN-HWY LEGAL	01-RES	06-RES	0.1965
U-100	0	0.468	UC-CLOSED	01-RES	DECOM	DECOM	0.4678
U-101	0	0.663	UC-OPEN	01-STO	01-STO	01-STO	0.6630
U-102	0	0.252	UC-OPEN	01-STO	01-STO	01-STO	0.2519
U-103	0	0.662	UC-M-07.00	M-07.00	DECOM	DECOM	0.6620
U-103	0.662	1.269	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.6070
U-103	1.269	1.324	UC-M-07.00	M-07.00	DECOM	DECOM	0.0550
U-104	0	0.116	UC-OPEN	OPEN-HWY LEGAL	DECOM	DECOM	0.1160
U-105	0	0.214	UC-OPEN	OPEN-HWY LEGAL	DECOM	DECOM	0.2135
U-106	0	0.427	UC-CLOSED	01-RES	DECOM	DECOM	0.4265
U-107	0	0.613	UC-CLOSED	OPEN-HWY LEGAL	DECOM	DECOM	0.6128
U-108	0	0.11	UC-CLOSED	01-RES	DECOM	DECOM	0.1100

ID	BMP	EMP	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	<b>ALTERNATIVE 4</b>	MILES
U-109	0	0.096	UC-CLOSED	01-RES	DECOM	DECOM	0.0961
U-110	0	0.566	UC-CLOSED	01-RES	DECOM	DECOM	0.5660
U-111	0	1.068	UC-CLOSED	OPEN-HWY LEGAL	DECOM	DECOM	1.0680
U-112	0	0.176	UC-OPEN	OPEN-HWY LEGAL	DECOM	DECOM	0.1760
U-113	0	0.308	UC-OPEN	OPEN-HWY LEGAL	DECOM	DECOM	0.3080
U-1132	0	0.631	CLOSED-AQ	01-RES	DECOM	DECOM	0.6310
U-1134	0	0.114	CLOSED-AQ	01-RES	DECOM	DECOM	0.1140
U-1138	0	1.431	CLOSED-AQ	01-RES	DECOM	DECOM	1.4309
U-1139	0	0.8	CLOSED-AQ	01-RES	DECOM	DECOM	0.7999
U-114	0	0.112	UC-OPEN	OPEN-HWY LEGAL	DECOM	DECOM	0.1119
U-1140	0	0.699	CLOSED-AQ	01-RES	DECOM	DECOM	0.6990
U-1141	0	0.499	CLOSED-AQ	01-RES	DECOM	DECOM	0.4990
U-115	0	0.238	UC-OPEN	OPEN-HWY LEGAL	OPEN-HWY LEGAL	DECOM	0.2375
U-116	0	0.116	UC-OPEN	OPEN-HWY LEGAL	DECOM	DECOM	0.1156
U-117	0	0.11	UC-CLOSED	NM	NM	NM	0.1100
U-117	0.1	0.632	UC-CLOSED	NM	NM	NOMTR	0.5200
U-119	0	0.482	CLOSED-LX	01-STO	DECOM	DECOM	0.4820
U-120	0	1.125	CLOSED-AQ	01-RES	DECOM	DECOM	1.1250

ID	ВМР	EMP	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	MILES
U-120	1.125	2.04	CLOSED-AQ	01-RES	06-RES	06-RES	0.9150
U-121	0	0.766	CLOSED-AQ	01-RES	06-RES	06-RES	0.7657
U-122	0	0.801	CLOSED-AQ	01-RES	06-RES	06-RES	0.8047
U-123	0	0.324	CLOSED-AQ	01-RES	DECOM	DECOM	0.3240
U-124	0	0.324	CLOSED-AQ	01-RES	DECOM	DECOM	0.3239
U-125	0	0.129	CLOSED-AQ	01-RES	DECOM	DECOM	0.1290
U-126	0	0.134	CLOSED-AQ	01-RES	DECOM	DECOM	0.1341
U-1261	0	2.008	CLOSED-AQ	01-RES	06-RES	06-RES	2.0080
U-1262	0	0.454	CLOSED-AQ	01-RES	DECOM	DECOM	0.4533
U-1263	0	0.81	CLOSED-AQ	01-RES	DECOM	DECOM	0.8096
U-1264	0	0.71	CLOSED-AQ	01-RES	DECOM	DECOM	0.7092
U-1265	0	0.479	CLOSED-AQ	01-RES	DECOM	DECOM	0.4786
U-1266	0	0.845	CLOSED-AQ	01-RES	DECOM	DECOM	0.8444
U-1267	0	0.579	CLOSED-AQ	01-RES	DECOM	DECOM	0.5782

ID	ВМР	EMP	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	<b>ALTERNATIVE 4</b>	MILES
U-127	0	0.285	CLOSED-LX	01-RES	DECOM	DECOM	0.2850
U-1274	0	0.792	CLOSED-AQ	01-RES	DECOM	DECOM	0.7916
U-1815	0	1.923	UC-CLOSED	01-RES	DECOM	DECOM	1.9230
U-1825	0	2.927	UC-CLOSED	DECOM	DECOM	DECOM	2.9270
U-1827	0	1.92	N	NM	NM	NOMTR	1.9196
U-1829	0	0.34	UC-OPEN	OPEN-HWY LEGAL	OPEN-HWY LEGAL	09-RES	0.3396
U-1838	0	2.565	UC-CLOSED	01-RES	DECOM	DECOM	2.5646
U-1841	0	0.115	UC-OPEN	M-07.00	M-08.00	OPEN-HWY LEGAL	0.1150
U-1841	0.115	0.393	UC-OPEN	M-07.00	M-08.00	M-08.10	0.2780
U-1881	0	1.447	UC-CLOSED	01-RES	DECOM	DECOM	1.4464
U-1884	0	0.19	UC-OPEN	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.1897
U-1891	0	1.651	UC-CLOSED	01-RES	DECOM	DECOM	1.6504
U-330-B1	0	1.643	UC-CLOSED	01-RES	DECOM	DECOM	1.6425
U-400	0	0.609	UC-OPEN	OPEN-HWY LEGAL	DECOM	DECOM	0.6089
U-401	0	0.733	UC-OPEN	OPEN-HWY LEGAL	DECOM	DECOM	0.7328
U-402	0	0.9527	UC-CLOSED	01-RES	DECOM	DECOM	0.9527
U-403	0	1.549	UC-CLOSED	01-RES	M-08.00	M-08.105	1.5490
U-403	1.549	2.448	UC-CLOSED	01-RES	DECOM	DECOM	0.8991
U-404	0	1.016	UC-CLOSED	01-RES	DECOM	DECOM	1.0160
U-405	0	0.236	UC-OPEN	OPEN-HWY LEGAL	DECOM	DECOM	0.2360
U-406	0	0.919	UC-CLOSED	01-RES	DECOM	DECOM	0.9190
U-407	0	0.463	UC-CLOSED	01-RES	DECOM	DECOM	0.4630
U-408	0	0.201	UC-CLOSED	01-RES	DECOM	DECOM	0.2010
U-4089	0.223	1.621	UC-CLOSED	01-RES	DECOM	DECOM	1.3980
U-409	0	0.129	UC-CLOSED	01-RES	DECOM	DECOM	0.1290
U-410	0	0.17	UC-CLOSED	01-RES	DECOM	DECOM	0.1697
U-411	0	1.431	UC-OPEN-10	10-RES	DECOM	DECOM	1.4310
U-4112	0	0.565	UC-M-07.00	M-07.00	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.5650
U-4112	0.565	1.574	UC-M-07.00	M-07.00	DECOM	DECOM	1.0090
U-4113	0	0.224	UC-OPEN-10	10-RES	DECOM	DECOM	0.2238
U-412	0	0.147	UC-OPEN-10	10-RES	DECOM	DECOM	0.1466

ID	ВМР	EMP	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	MILES
U-4128	0	0.385	UC-M-07.00	M-07.00	NM	M-08.10	0.3848

ID	ВМР	EMP	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	MILES
U-413	0	0.1	UC-CLOSED	01-RES	DECOM	DECOM	0.1000
U-4133	0	0.676	UC-OPEN	OPEN-HWY LEGAL	DECOM	DECOM	0.6760
U-4133A	0	0.983	UC-OPEN	OPEN-HWY LEGAL	DECOM	DECOM	0.9830
U-4133B	0	0.982	UC-CLOSED	01-RES	DECOM	DECOM	0.9820
U-4133C	0	0.311	UC-OPEN	OPEN-HWY LEGAL	DECOM	DECOM	0.3105
U-4133D	0	0.947	UC-OPEN	OPEN-HWY LEGAL	DECOM	DECOM	0.9466
U-414	0	2.745	UC-CLOSED	01-RES	DECOM	DECOM	2.7442
U-415	0	0.161	UC-CLOSED	01-RES	DECOM	DECOM	0.1610
U-416	0	0.064	UC-CLOSED	01-RES	DECOM	DECOM	0.0640
U-416	0.064	0.336	NO-ROW	NO-ROW	NO-ROW	NO-ROW	0.2720
U-416	0.336	1.688	UC-CLOSED	01-RES	DECOM	DECOM	1.3520
U-417	0	1.766	UC-M-07.00	M-07.00	DECOM	DECOM	1.7660
U-419	0	0.12	UC-OPEN	M-07.00	DECOM	DECOM	0.1200
U-420	0	0.257	UC-CLOSED	01-RES	DECOM	DECOM	0.2568
U-421	0	0.299	UC-CLOSED	01-RES	DECOM	DECOM	0.2990
U-422	0	0.307	UC-CLOSED	01-RES	DECOM	DECOM	0.3068
U-424	0	0.065	OPEN-LX	01-STO	DECOM	DECOM	0.0648
U-425	0	0.523	OPEN-LX	01-STO	DECOM	DECOM	0.5228
U-427	0	0.611	P-ALT2&3	MT NEW CONSTRUCTION	MT NEW CONSTRUCTION	MT NEW CONSTRUCTION	0.6108
U-428	0	0.303	CLOSED-AQ	01-RES	DECOM	DECOM	0.3030
U-429	0	0.226	UC-OPEN	OPEN-HWY LEGAL	DECOM	DECOM	0.2260
U-430	0	0.216	UC-OPEN	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	0.2159
U-431	0	0.572	UC-OPEN	OPEN-HWY LEGAL	DECOM	DECOM	0.5720
U-432	0	0.097	UC-CLOSED	01-RES	DECOM	DECOM	0.0970
U-433	0	0.2637	UC-OPEN	OPEN-HWY LEGAL	DECOM	DECOM	0.2637
U-434	0	0.41	UC-OPEN	OPEN-HWY LEGAL	DECOM	DECOM	0.4100
U-435	0	0.146	UC-OPEN	OPEN-HWY LEGAL	DECOM	DECOM	0.1460
U-436	0	0.263	UC-OPEN	OPEN-HWY LEGAL	DECOM	DECOM	0.2630
U-441	0	0.383	UC-CLOSED	01-RES	DECOM	DECOM	0.3830
U-442	0	0.117	UC-CLOSED	01-RES	DECOM	DECOM	0.1169
U-443	0	0.227	UC-CLOSED	01-RES	DECOM	DECOM	0.2270
U-444	0	0.586	UC-CLOSED	01-RES	DECOM	DECOM	0.5860
U-445	0	0.128	UC-OPEN	01-RES	DECOM	DECOM	0.1278
U-446	0	0.142	OPEN-HWY LEGAL	OPEN-HWY LEGAL	OPEN-HWY LEGAL	DECOM	0.1417

ID	ВМР	EMP	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	MILES
U-447	0	0.779	UC-M-11.00	NM	NM	NM	0.7790
U-448	0	0.312	UC-OPEN	DECOM	DECOM	DECOM	0.3120
U-449	0	0.166	CLOSED-AQ	01-RES	DECOM	M-08.00	0.1656
U-771-A1	0	0.102	11-	11-RES	11-RES	11-RES	0.1020
U-771-A1	0.102	0.217	11-	11-RES	NM	NM	0.1149
U-8963	0	0.205	UC-CLOSED	01-RES	DECOM	DECOM	0.2050
U-NEW-	0	0.179	P-ALT2&3	ROAD NEW CONSTRUCTION	ROAD NEW CONSTRUCTION	ROAD NEW CONSTRUCTION	0.1784
U-NEW-	0	0.378	P-ALT2&3	NM NEW CONSTRUCTION	NM NEW CONSTRUCTION	NM NEW CONSTRUCTION	0.3780
U-NEW-	0	0.496	P-	P-ALT4	P-ALT4	NM NEW CONSTRUCTION	0.4960
U-NEW2	0	0.119	P-	MT NEW CONSTRUCTION	P-ALT2	P-ALT2	0.1186

ID	ВМР	EMP	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	MILES
U-NEW3	0	0.26	P-ALT2	MT NEW CONSTRUCTION	P-ALT2	P-ALT2	0.2S98
U-NEW4	0	0.829	P-ALT2&3	MT NEW CONSTRUCTION	MT NEW CONSTRUCTION	MT NEW CONSTRUCTION	0.8290
U-NEW-4043	0	0.96	P-ALT2&3	MT NEW CONSTRUCTION	MT NEW CONSTRUCTION	MT NEW CONSTRUCTION	0.0960
U-NEW-4090	0	0.389	P-ALT3	P-ALT3	MT NEW CONSTRUCTION	MT NEW CONSTRUCTION	0.3890
U-NEW-4090-C	0	0.089	P-ALT3	P-ALT3	MT NEW CONSTRUCTION	MT NEW CONSTRUCTION	0.0890
U-NEW6	0	0.573	P-ALT4	P-ALT4	P-ALT4	MT NEW CONSTRUCTION	0.5730

Table C- 2. Trails of Interest – Proposed changes under alternatives 2, 3, and 4 (to use with maps in appendix G)

Trail Number	Trail Name	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Miles
417	Stonewall	Motorized trail – no seasonal restrictions	Same as alternative 1	Motorized trail – closed 9/1 – 6/30	Old trail – would be relocated	0.57
417	Stonewall	Motorized trail – no seasonal restrictions	Same as alternative 1	Motorized trail – closed 9/1 – 6/30	Motorized trail – closed 10/15 – 6/30	0.04
417	Stonewall	Motorized trail – no seasonal restrictions	Same as alternative 1	Motorized trail – closed 9/1 – 6/30	Old trail – would be relocated	0.24
417	Stonewall	Motorized trail – no seasonal restrictions	Same as alternative 1	Motorized trail – closed 9/1 – 6/30	Motorized trail – closed 10/15 – 6/30	0.11
417	Stonewall	Motorized trail – no seasonal restrictions	Same as alternative 1	Motorized trail – closed 9/1 – 6/30	Motorized trail – closed 10/15 – 6/30	0.03

Trail Number	Trail Name	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Miles
417	Stonewall	Motorized trail – no seasonal restrictions	Same as alternative 1	Motorized trail – closed 9/1 – 6/30	Old trail – would be relocated	0.21
417	Stonewall	Motorized trail – no seasonal restrictions	Same as alternative 1	Motorized trail – closed 9/1 – 6/30	Motorized trail – closed 10/15 – 6/30	0.13
417	Stonewall	Motorized trail – no seasonal restrictions	Same as alternative 1	Motorized trail – closed 9/1 – 6/30	Old trail – would be relocated	0.85
417	Stonewall	Motorized trail – no seasonal restrictions	Same as alternative 1	Motorized trail – closed 9/1 – 6/30	Old trail – would be relocated	0.10
417	Stonewall	Motorized trail – no seasonal restrictions	Same as alternative 1	Motorized trail – closed 9/1 – 6/30	Motorized trail – closed 10/15 – 6/30	2.45
417	Stonewall				New reconstructed section	0.23
417	Stonewall				New reconstructed section	0.39
417	Stonewall				New reconstructed section	0.35
417	Stonewall				New reconstructed section	0.87
417	Stonewall				New reconstructed section	1.3
440	Continental Divide Trail	Trail is along an open road	Motorized trail – no seasonal restrictions	Non-motorized	Old trail – would be relocated	0.38
440	Continental Divide Trail	Trail is along an open road	Motorized trail – no seasonal restrictions	Motorized trail – closed 9/1 – 6/30	Open to highway legal vehicles	0.35
440	Continental Divide Trail	Motorized trail – no seasonal restrictions	Motorized trail – no seasonal restrictions	Non-motorized	Old trail – would be relocated	0.14
440	Continental Divide Trail	Motorized trail – no seasonal restrictions	Motorized trail – no seasonal restrictions	Non-motorized	Old trail – would be relocated	0.85
440	Continental Divide Trail	Trail is along an open road	Motorized trail – no seasonal restrictions	Non-motorized	Non-motorized	1.16
440	Continental Divide Trail	Trail is along an open road	Motorized trail – no seasonal restrictions	Non-motorized	Non-motorized	0.83
440	Continental Divide	Trail is along an open	Motorized trail - no	Motorized trail - closed	Motorized trail - closed	0.88

Trail Number	Trail Name	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Miles
	Trail	road	seasonal restrictions	9/1 – 6/30	10/15 – 6/30	
440	Continental Divide Trail	Motorized trail – no seasonal restrictions	Motorized trail – no seasonal restrictions	Non-motorized	Non-motorized	0.78
440	Continental Divide Trail	Motorized trail – single track – no seasonal restrictions	Motorized trail – single track – no seasonal restrictions	Non-motorized	Non-motorized	0.59
440	Continental Divide Trail	Motorized trail – single track – no seasonal restrictions	Motorized trail – single track – no seasonal restrictions	Non-motorized	Non-motorized	8.50
440	Continental Divide Trail	Motorized trail – single track – no seasonal restrictions	Motorized trail – single track – no seasonal restrictions	Non-motorized	Non-motorized	1.37
440	Continental Divide Trail	Trail is along an open road	Motorized trail – single track – no seasonal restrictions	Non-motorized	Non-motorized	0.13
440	Continental Divide Trail	Trail is along an open road	Motorized trail – single track – no seasonal restrictions	Non-motorized	Non-motorized	0.50
440	Continental Divide Trail	Non-motorized	Non-motorized	Non-motorized	Non-motorized	11.18
440	Continental Divide Trail	Non-motorized	Non-motorized	Non-motorized	Non-motorized	6.38
440	Continental Divide Trail	Non-motorized	Non-motorized	Non-motorized	Non-motorized	7.15
440	Continental Divide Trail	Non-motorized	Non-motorized	Non-motorized	Non-motorized	7.02
440	Continental Divide Trail	Trail is along an open road	Trail is along an open road	Trail is along an open road	Trail is along an open road	0.11
440	Continental Divide Trail	Trail is along an open road	Trail is along an open road 1	Non-motorized	Old trail – would be relocated	0.22
440	Continental Divide Trail	Trail is along an open road	Trail is along an open road	Trail is along an open road	Trail is along an open road	0.51
440	Continental Divide Trail	Trail is along an open road	Trail is along an open road	Trail is along an open road	Trail is along an open road	0.04

Trail Number	Trail Name	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Miles
440	Continental Divide Trail	Trail is along an open road	Trail is along an open road	Trail is along an open road	Trail is along an open road	0.06
440	Continental Divide Trail				New reconstructed section	0.15
440	Continental Divide Trail				New reconstructed section	0.60
440	Continental Divide Trail				New reconstructed section	2.11
467	Helmville-Gould Trail	Motorized trail – no seasonal restrictions	Motorized trail – no seasonal restrictions	Non-motorized	Old trail – would be relocated	0.83
467	Helmville-Gould Trail	Motorized trail – no seasonal restrictions	Motorized trail – no seasonal restrictions	Non-motorized	Motorized trail – closed 10/15 – 6/30	0.59
467	Helmville-Gould Trail	Motorized trail – no seasonal restrictions	Motorized trail – no seasonal restrictions	Non-motorized	Old trail – would be relocated	0.24
467	Helmville-Gould Trail	Motorized trail – no seasonal restrictions	Motorized trail – no seasonal restrictions	Non-motorized	Motorized trail – closed 10/15 – 6/30	0.05
467	Helmville-Gould Trail	Motorized trail – no seasonal restrictions	Motorized trail – no seasonal restrictions	Non-motorized	Motorized trail – closed 10/15 – 6/30	0.18
467	Helmville-Gould Trail	Motorized trail – no seasonal restrictions	Motorized trail – no seasonal restrictions	Non-motorized	Old trail – would be relocated	0.19
467	Helmville-Gould Trail	Motorized trail – no seasonal restrictions	Motorized trail – no seasonal restrictions	Non-motorized	Motorized trail – closed 10/15 – 6/30	2.86
467	Helmville-Gould Trail	Motorized trail – no seasonal restrictions	Motorized trail – no seasonal restrictions	Non-motorized	Old trail – would be relocated	0.28
467	Helmville-Gould Trail	Motorized trail – no seasonal restrictions	Motorized trail – no seasonal restrictions	Non-motorized	Motorized trail – closed 10/15 – 6/30	0.46
467	Helmville-Gould Trail	Motorized trail – no seasonal restrictions	Motorized trail – no seasonal restrictions	Non-motorized	Old trail – would be relocated	0.92
467	Helmville-Gould Trail	Motorized trail – no seasonal restrictions	Motorized trail – no seasonal restrictions	Non-motorized	Motorized trail – closed 10/15 – 6/30	0.045
467	Helmville-Gould Trail	Motorized trail – no seasonal restrictions	Motorized trail – no seasonal restrictions	Non-motorized	Motorized trail – closed 10/15 – 6/30	3.00
467	Helmville-Gould	Motorized trail – no	Motorized trail - no	Non-motorized	Motorized trail - closed	0.98

Trail Number	Trail Name	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Miles
	Trail	seasonal restrictions	seasonal restrictions		10/15 – 6/30	
467	Helmville-Gould Trail	Motorized trail – no seasonal restrictions	Motorized trail – no seasonal restrictions	Non-motorized	Old trail – would be relocated	0.55
467	Helmville-Gould Trail	Motorized trail – no seasonal restrictions	Motorized trail – no seasonal restrictions	Non-motorized	Old trail – would be relocated	0.23
467	Helmville-Gould Trail	Motorized trail – no seasonal restrictions	Motorized trail – no seasonal restrictions	Non-motorized	Motorized trail – closed 10/15 – 6/30	0.34
467	Helmville-Gould Trail	Motorized trail – no seasonal restrictions	Motorized trail – no seasonal restrictions	Non-motorized	Old trail – would be relocated	1.05
467	Helmville-Gould Trail				New reconstructed section	0.37
467	Helmville-Gould Trail				New reconstructed section	1.08
467	Helmville-Gould Trail				New reconstructed section	0.97
467	Helmville-Gould Trail				New reconstructed section	0.85
467	Helmville-Gould Trail				New reconstructed section	0.29
467	Helmville-Gould Trail				New reconstructed section	0.70
467	Helmville-Gould Trail				New reconstructed section	0.22
467	Helmville-Gould Trail				New reconstructed section	0.89

Table C- 3. Proposed Mountain Bike system under alternatives 2 and 3 (to use with maps in appendix G)

Route Number	Туре	Miles	Alternative 2	Alternative 3
417	Trail	4.75	Mt Bike-Foot-Horse-MT Trail	Mt Bike-Foot-Horse-MT Trai
418	Trail	3.50	Mt Bike-Foot-Horse-MT Trail	Mt Bike-Foot-Horse
440	Trail	15.92	Mt Bike-Foot-Horse-MT Trail	Mt Bike-Foot-Horse
440	Trail	1.23	Mt Bike-Foot-Horse-MT Trail	Mt Bike-Foot-Horse-MT Trai
467	Trail	12.87	Mt Bike-Foot-Horse-MT Trail	Mt Bike-Foot-Horse
485	Road	0.04	Road-Mixed Use	Road-Mixed Use
607	Road	2.54	Road-Mixed Use	Road-Mixed Use
607	Road	1.25	Road-Mixed Use	Road-Mixed Use
1821	Road	1.58	Road-Mixed Use	Mt Bike-Foot-Horse-MT Trai
1843	Road	1.15	Road-Mixed Use	Road-Mixed Use
1881	Road	0.06	Mt Bike-Foot-Horse	Mt Bike-Foot-Horse
4106	Road	0.08	Road-Mixed Use	Road-Mixed Use
4135	Road	2.93	Road-Mixed Use	Road-Mixed Use
1800-B1	Road	0.29	Mt Bike-Foot-Horse	Mt Bike-Foot-Horse
1821-B1	Road	0.59	Mt Bike-Foot	Mt Bike-Foot-Horse-MT Trai
1821-B1-NEW	Road	0.15	Mt Bike-Foot	Mt Bike-Foot-Horse-MT Trai
1826-B1	Road	0.46	Mt Bike-Foot-Horse	Mt Bike-Foot-Horse
1826-B1	Road	0.10	Mt Bike-Foot-Horse	Mt Bike-Foot-Horse
1843-A1	Road	0.58	Road-Mixed Use	Road-Mixed Use
1881-A1	Road	0.97	Mt Bike-Foot-Horse	Mt Bike-Foot-Horse
1881-A2	Road	0.38	Mt Bike-Foot-Horse	Mt Bike-Foot-Horse
1881-B1	Road	0.01	Mt Bike-Foot-Horse	Mt Bike-Foot-Horse
4043-D1	Road	0.18	Mt Bike-Foot	Mt Bike-Foot
4106-001	Road	0.09	Road-Mixed Use	Road-Mixed Use
4106-002	Road	0.75	Mt Bike-Foot-MT Trail	Mt Bike-Foot-MT Trail
485-H3	Road	0.36	Road-Mixed Use	Road-Mixed Use
607-A1	Road	1.35	Mt Bike-Foot-Horse	Mt Bike-Foot-Horse
607-C1	Road	1.20	Mt Bike-Foot	Mt Bike-Foot

Route Number	Туре	Miles	Alternative 2	Alternative 3
607-H1	Road	0.76	Road-Mixed Use	Road-Mixed Use
MB-1	New	9.32	Mt Bike-Foot	Mt Bike-Foot
MB-10	New	0.21	Mt Bike-Foot-Horse	Mt Bike-Foot-Horse
MB-11	New	1.82	Mt Bike-Foot-Horse	Mt Bike-Foot-Horse
MB-12	New	1.91	Mt Bike-Foot-Horse	Mt Bike-Foot-Horse
MB-13	New	0.70	Mt Bike-Foot-Horse	Mt Bike-Foot-Horse
MB-15	New	0.06	Mt Bike-Foot-Horse	Mt Bike-Foot-Horse
MB-2	New	1.05	Mt Bike-Foot	Mt Bike-Foot
MB-3	New	0.23	Mt Bike-Foot-Horse	Mt Bike-Foot-Horse
MB-4	New	1.63	Mt Bike-Foot-Horse	Mt Bike-Foot-Horse
MB-5	New	0.96	Mt Bike-Foot	Mt Bike-Foot
MB-6	New	0.34	Mt Bike-Foot	Mt Bike-Foot
MB-7	New	3.47	Mt Bike-Foot	Mt Bike-Foot
MB-8	New	1.59	Mt Bike-Foot	Mt Bike-Foot
MB-9	New	7.84	Mt Bike-Foot-Horse	Mt Bike-Foot-Horse
U-117	Trail	0.17	Mt Bike-Foot	Mt Bike-Foot
U-1838	Road	1.59	Mt Bike-Foot-Horse	Mt Bike-Foot-Horse
U-1881	Road	0.31	Mt Bike-Foot-Horse	Mt Bike-Foot-Horse
U-441	Road	0.38	Mt Bike-Foot-Horse	Mt Bike-Foot-Horse

MT Bike = mountain bike; Foot = foot travel (hiking); Horse = stock/equestrian use; MT trail - motorized trail

Table C- 4. Proposed Mountain Bike system under alternative 4 (to use with maps in appendix G)

Route Number	Туре	Miles	Alternative 4
417	Trail	3.78	Mt Bike-Foot-Horse-MT Trail
417	Trail	2.112	Mt Bike-Foot-Horse-MT Trail
418	Trail	3.49	Mt Bike-Foot-Horse
440	Trail	10.63	Mt Bike-Foot-Horse
440	Trail	1.06	Mt Bike-Foot-Horse-MT Trail
440	Trail	2.59	Mt Bike-Foot-Horse
440	Trail	0.76	Mt Bike-Foot-Horse
467	Trail	3.01	Mt Bike-Foot-Horse-MT Trail
467	Trail	2.86	Mt Bike-Foot-Horse-MT Trail
467	Trail	0.98	Mt Bike-Foot-Horse-MT Trail
467	Trail	0.18	Mt Bike-Foot-Horse-MT Trail
467	Trail	0.34	Mt Bike-Foot-Horse-MT Trail
467	Trail	0.45	Mt Bike-Foot-Horse-MT Trail
467	Trail	0.59	Mt Bike-Foot-Horse-MT Trail
467	Trail	0.04	Mt Bike-Foot-Horse-MT Trail
467	Trail	0.05	Mt Bike-Foot-Horse-MT Trail
607	Road	2.54	Road-Mixed Use
607	Road	1.25	Road-Mixed Use
1821	Road	1.58	Mt Bike-Foot-Horse-MT Trail
1843	Road	1.15	Road-Mixed Use
1881	Road	0.06	Mt Bike-Foot-Horse
4106	Road	0.08	Road-Mixed Use
4135	Road	2.93	Road-Mixed Use
1800-B1	Road	0.29	Mt Bike-Foot-Horse
1821-B1	Road	0.59	Mt Bike-Foot-Horse-MT Trail
1821-B1-NEW	Road	0.15	Mt Bike-Foot-Horse-MT Trail
1843-A1	Road	0.58	Road-Mixed Use
1881-A1	Road	0.97	Mt Bike-Foot-Horse
1881-A2	Road	0.38	Mt Bike-Foot-Horse
1881-B1	Road	0.01	Mt Bike-Foot-Horse
4043-D1	Road	0.18	Mt Bike-Foot
4106-001	Road	0.09	Road-Mixed Use
4106-002	Road	0.75	Mt Bike-Foot-MT Trail
440-NEW-1	Trail	0.15	Mt Bike-Foot-Horse
440-NEW-2	Trail	0.60	Mt Bike-Foot-Horse
440-NEW-3	Trail	2.11	Mt Bike-Foot-Horse
467-NEW-1	Trail	0.37	Mt Bike-Foot-Horse-MT Trail
467-NEW-2	Trail	1.08	Mt Bike-Foot-Horse-MT Trail
467-NEW-3	Trail	0.97	Mt Bike-Foot-Horse-MT Trail
467-NEW-4	Trail	0.85	Mt Bike-Foot-Horse-MT Trail
467-NEW-5	Trail	0.29	Mt Bike-Foot-Horse-MT Trail
467-NEW-6	Trail	0.70	Mt Bike-Foot-Horse-MT Trail

Route Number	Туре	Miles	Alternative 4
467-NEW-7	Trail	0.22	Mt Bike-Foot-Horse-MT Trail
467-NEW-8	Trail	0.89	Mt Bike-Foot-Horse-MT Trail
607-A1	Road	1.35	Mt Bike-Foot-Horse
607-C1	Road	1.20	Mt Bike-Foot
607-H1	Road	0.76	Road-Mixed Use
MB-1	New	9.32	Mt Bike-Foot
MB-12	New	1.91	Mt Bike-Foot-Horse
MB-13	New	0.70	Mt Bike-Foot-Horse
MB-15	New	0.06	Mt Bike-Foot-Horse
MB-2	New	1.05	Mt Bike-Foot
MB-3	New	0.23	Mt Bike-Foot-Horse
MB-5	New	0.96	Mt Bike-Foot
MB-6	New	0.34	Mt Bike-Foot
MB-7	New	3.47	Mt Bike-Foot
MB-8	New	1.59	Mt Bike-Foot
U-117	Trail	0.17	Mt Bike-Foot
U-1881	Road	0.31	Mt Bike-Foot-Horse
U-441	Road	0.38	Mt Bike-Foot-Horse

MT Bike = mountain bike; Foot = foot travel (hiking); Horse = stock/equestrian use; MT trail - motorized trail

Table C- 5. Existing Motorized Trail system for alternative 1

Alternative 1 – Motorized Trails					
Trail Name	Code	Definition	Miles		
401	M-07.00	Motorized Trail - vehicles less than 50" - no seasonal restrictions	1.68		
404	M-07.00	Motorized Trail - vehicles less than 50" - no seasonal restrictions	3.99		
4106-002	UC-M-07.00	Unclassified Motorized Trail - No Seasonal Restrictions	0.75		
417	M-07.00	Motorized Trail - vehicles less than 50" – no seasonal restrictions	4.76		
418	M-07.00 and M-10.00	Unclassified Motorized Trail - No Seasonal Restrictions And Motorized Trail - single track - no seasonal restrictions	7.10		
440	M-07.00 and M-10.00	Unclassified Motorized Trail - No Seasonal Restrictions And Motorized Trail - single track - no seasonal restrictions	12.25		
467	M-07.00	Motorized Trail - vehicles less than 50" - no seasonal restrictions	13.10		
485	M-07.00	Motorized Trail - vehicles less	4.13		

Alternative 1 – Motorized Trails					
Trail Name	Code	Definition	Miles		
		than 50" - no seasonal restrictions			
487	M-10.00	Motorized Trail - single track - no seasonal restrictions	2.88		
U-103	UC-M-07.00	Motorized Trail - vehicles less than 50" - no seasonal restrictions	1.32		
U-4112	UC-M-07.00	Motorized Trail - vehicles less than 50" - no seasonal restrictions	1.57		
U-4128	UC-M-07.00	Motorized Trail - vehicles less than 50" - no seasonal restrictions	0.38		
U-417	UC-M-07.00	Motorized Trail - vehicles less than 50" - no seasonal restrictions	1.76		
U-447	UC-M-07.00	Motorized Trail - vehicles less than 50" - no seasonal restrictions	0.77		
Total			Approximately 56 miles		

Table C- 6. Proposed motorized trail system for alternative 2

Alternative 2 – Proposed Motorized Trails					
Trail Name	Code	Definition	Miles		
1824-D1	M-07.00	Motorized Trail - vehicles less than 50" - no seasonal restrictions	2.43		
1841	M-07.00	Motorized Trail - vehicles less than 50" - no seasonal restrictions	3.69		
1841-D1	M-07.00	Motorized Trail - vehicles less than 50" - no seasonal restrictions	0.86		
1841-J1	M-07.00	Motorized Trail - vehicles less than 50" - no seasonal restrictions	0.31		
1879	M-07.00	Motorized Trail - vehicles less than 50" - no seasonal restrictions	1.54		
1891	M-07.00	Motorized Trail - vehicles less than 50" - no seasonal restrictions	0.87		
4043-F1	M-07.00	Motorized Trail - vehicles less than 50" - no seasonal restrictions	0.60		
4082	M-07.00	Motorized Trail - vehicles less than 50" - no seasonal restrictions	2.67		

Alternative 2 – Proposed Motorized Trails			
Trail Name	Code	Definition	Miles
4082-H1	M-07.00	Motorized Trail - vehicles less than 50" - no seasonal restrictions	1.60
4082-H2	M-07.00	Motorized Trail - vehicles less than 50" - no seasonal restrictions	0.42
4082-l1	M-07.00	Motorized Trail - vehicles less than 50" - no seasonal restrictions	0.70
4082-12	M-07.00	Motorized Trail - vehicles less than 50" - no seasonal restrictions	0.37
4086	M-07.00	Motorized Trail - vehicles less than 50" - no seasonal restrictions	2.16
4086-B1	M-08.00	Motorized Trail - vehicles less than 50" - closed 9/1-6/30	0.92
4086-B3	M-07.00	Motorized Trail - vehicles less than 50" - no seasonal restrictions	0.27
4086-B4	M-07.00	Motorized Trail - vehicles less than 50" - no seasonal restrictions	0.06
4086-B5	M-07.00	Motorized Trail - vehicles less than 50" - no seasonal restrictions	0.25
4090-C1	M-07.00	Motorized Trail - vehicles less than 50" - no seasonal restrictions	0.52
4106-002	M-07.00	Motorized Trail - vehicles less than 50" - no seasonal restrictions	0.75
417	M-07.00	Motorized Trail - vehicles less than 50" - no seasonal restrictions	4.76
418	M-10.00	Motorized Trail - single track - no seasonal restrictions	3.12
440	M-07.00 and M-10.00	Unclassified Motorized Trail - No Seasonal Restrictions And Motorized Trail - single track - no seasonal restrictions	16.48
467	M-07.00	Motorized Trail - vehicles less than 50" - no seasonal restrictions	13.10
487	M-10.00	Motorized Trail - single track - no seasonal restrictions	2.88
U-015	M-08.00	Motorized Trail - vehicles less than 50" - closed 9/1-6/30	1.46
U-018	M-08.00	Motorized Trail - vehicles less than 50" - closed 9/1-6/30	0.69

Alternative 2 – Proposed Motorized Trails			
Trail Name	Code	Definition	Miles
U-020	M-08.00	Motorized Trail - vehicles less than 50" - closed 9/1-6/30	4.97
U-021	M-08.00	Motorized Trail - vehicles less than 50" - closed 9/1-6/30	1.12
U-026	M-08.00	Motorized Trail - vehicles less than 50" - closed 9/1-6/30	0.53
U-027	M-08.00	Motorized Trail - vehicles less than 50" - closed 9/1-6/30	3.09
U-028	M-08.00	Motorized Trail - vehicles less than 50" - closed 9/1-6/30	0.84
U-031	M-08.00	Motorized Trail - vehicles less than 50" - closed 9/1-6/30	3.84
U-034	M-08.00	Motorized Trail - vehicles less than 50" - closed 9/1-6/30	1.15
U-035	M-08.00	Motorized Trail - vehicles less than 50" - closed 9/1-6/30	2.26
U-038	M-08.00	Motorized Trail - vehicles less than 50" - closed 9/1-6/30	3.52
U-103	M-07.00	Motorized Trail - vehicles less than 50" - no seasonal restrictions	0.71
U-1841	M-07.00	Motorized Trail - vehicles less that 50" - no seasonal restrictions	0.39
U-4112	M-07.00	Motorized Trail - vehicles less that 50" - no seasonal restrictions	1.57
U-4128	M-07.00	Motorized Trail - vehicles less than 50" - no seasonal restrictions	0.38
U-417	M-07.00	Motorized Trail - vehicles less than 50" - no seasonal restrictions	1.76
U-419	M-07.00	Motorized Trail - vehicles less than 50" - no seasonal restrictions	0.36
U-427	New construction		0.61
U-NEW-2	New construction		0.11
U-NEW-3	New construction		0.25
U-NEW4	New construction		0.83
U-NEW-4043	New construction		0.01
Total			Approximately 92 miles

Table C-7. Proposed motorized trail system for alternative 3

	Alternative 3 – Propos	sed Motorized Trails	
Trail Name	Code	Definition	Miles
1821	M-08.00	Motorized Trail - vehicles less than 50" - closed 9/1-6/30	1.58
1821-B1	M-08.00	Motorized Trail - vehicles less than 50" - closed 9/1-6/30	0.591
1821-B1	New construction		0.153
1824-D1	M-08.00	Motorized Trail - vehicles less than 50" - closed 9/1-6/30	2.43
1825-C1	M-08.00	Motorized Trail - vehicles less than 50" - closed 9/1-6/30	0.88
1841	M-08.00	Motorized Trail - vehicles less than 50" - closed 9/1-6/30	1.4
1841-D1	M-08.00	Motorized Trail - vehicles less than 50" - closed 9/1-6/30	0.347
1841-D1	New construction		1.00
1891	M-08.00	Motorized Trail - vehicles less than 50" - closed 9/1-6/30	0.87
4043	M-08.00	Motorized Trail - vehicles less than 50" - closed 9/1-6/30	1.05
4043-F1	M-08.00	Motorized Trail - vehicles less than 50" - closed 9/1-6/30	0.76
4082	M-08.00	Motorized Trail - vehicles less than 50" - closed 9/1-6/30	2.67
4082-H1	M-08.00	Motorized Trail - vehicles less than 50" - closed 9/1-6/30	1.60
4082-I1	M-08.00	Motorized Trail - vehicles less than 50" - closed 9/1-6/30	0.70
4082-12	M-08.00	Motorized Trail - vehicles less than 50" - closed 9/1-6/30	0.37
4086	M-08.00	Motorized Trail - vehicles less than 50" - closed 9/1-6/30	2.16
4086-B1	M-08.00	Motorized Trail - vehicles less than 50" - closed 9/1-6/30	0.92
4086-B3	M-08.00	Motorized Trail - vehicles less than 50" - closed 9/1-6/30	0.27
4086-B4	M-08.00	Motorized Trail - vehicles less than 50" - closed 9/1-6/30	0.06
4086-B5	M-08.00	Motorized Trail - vehicles less than 50" - closed 9/1-6/30	0.25
4090	M-08.00	Motorized Trail - vehicles less than 50" - closed 9/1-6/30	1.03
4090-F1	M-08.00	Motorized Trail - vehicles less than 50" - closed 9/1-6/30	0.62
4106-002	M-08.00	Motorized Trail - vehicles less than 50" - closed 9/1-6/30	0.75
417	M-08.00	Motorized Trail - vehicles less than 50" - closed 9/1-6/30	4.76
440	M-08.00	Motorized Trail - vehicles less	1.23

Alternative 3 – Proposed Motorized Trails			
Trail Name	Code	Definition	Miles
		than 50" - closed 9/1-6/30	
626-A1	M-08.00	Motorized Trail - vehicles less than 50" - closed 9/1-6/30	1.37
626-B1	M-08.00	Motorized Trail - vehicles less than 50" - closed 9/1-6/30	0.92
626-C1	M-08.00	Motorized Trail - vehicles less than 50" - closed 9/1-6/30	0.24
U-015	M-08.00	Motorized Trail - vehicles less than 50" - closed 9/1-6/30	1.46
U-020	M-08.00	Motorized Trail - vehicles less than 50" - closed 9/1-6/30	4.97
U-027	M-08.00	Motorized Trail - vehicles less than 50" - closed 9/1-6/30	1.41
U-028	M-08.00	Motorized Trail - vehicles less than 50" - closed 9/1-6/30	0.40
U-031	M-08.00	Motorized Trail - vehicles less than 50" - closed 9/1-6/30	0.86
U-034	M-08.00	Motorized Trail - vehicles less than 50" - closed 9/1-6/30	1.15
U-035	M-08.00	Motorized Trail - vehicles less than 50" - closed 9/1-6/30	1.50
U-1841	M-08.00	Motorized Trail - vehicles less than 50" - closed 9/1-6/30	0.47
U-403	M-08.00	Motorized Trail - vehicles less than 50" - closed 9/1-6/30	1.54
U-427	New construction		0.61
U-NEW4	New construction		0.41
U-NEW-4043	New construction		0.40
U-NEW-4090	New construction		0.38
U-NEW-4090-C	New construction		0.01
Total	Total Approximately 47 mile		

Table C- 8. Proposed motorized trail system for alternative 4

Alternative 4 – Proposed Motorized Trails			
Trail Name	Code	Definition	Miles
1821	M-08.00	Motorized Trail - vehicles less than 50" - closed 9/1-6/30	1.58
1821-B1	M-08.00	Motorized Trail - vehicles less than 50" - closed 9/1-6/30	0.59
1821-B1-new	New construction		0.15
1824-C1	M-08.105	Motorized Trail - vehicles less than 50" - closed 10/15 – 5/31	1.66
1825-C1	M-08.10	Motorized Trail - vehicles less than 50" - closed 10/15 - 6/30	0.88
1841	M-08.10	Motorized Trail - vehicles less	1.4

Alternative 4 – Proposed Motorized Trails			
Trail Name	Code	Definition	Miles
		than 50" - closed 10/15 - 6/30	
1841-D1	M-08.10	Motorized Trail - vehicles less than 50" - closed 10/15 - 6/30	0.34
1841-D1	New construction		1.00
1891	M-08.10	Motorized Trail - vehicles less than 50" - closed 10/15 - 6/30	0.87
4043	M-08.105	Motorized Trail - vehicles less than 50" - closed 10/15 - 5/31	1.05
4043-F1	M-08.105	Motorized Trail - vehicles less than 50" - closed 10/15 – 5/31	0.76
4082	M-08.105	Motorized Trail - vehicles less than 50" - closed 10/15 – 5/31	2.67
4082-H1	M-08.105	Motorized Trail - vehicles less than 50" - closed 10/15 – 5/31	1.60
4082-I1	M-08.105	Motorized Trail - vehicles less than 50" - closed 10/15 – 5/31	0.70
4082-12	M-08.105	Motorized Trail - vehicles less than 50" - closed 10/15 – 5/31	0.37
4086	M-08.105	Motorized Trail - vehicles less than 50" - closed 10/15 - 5/31	2.16
4086-B1	M-08.105	Motorized Trail - vehicles less than 50" - closed 10/15 – 5/31	0.92
4086-B3	M-08.105	Motorized Trail - vehicles less than 50" - closed 10/15 - 5/31	0.27
4086-B4	M-08.105	Motorized Trail - vehicles less than 50" - closed 10/15 - 5/31	0.06
4086-B5	M-08.105	Motorized Trail - vehicles less than 50" - closed 10/15 - 5/31	0.25
4090	M-08.105	Motorized Trail - vehicles less than 50" - closed 10/15 – 5/31	1.03
4090-F1	M-08.105	Motorized Trail - vehicles less than 50" - closed 10/15 – 5/31	0.62
4106-002	M-08.105	Motorized Trail - vehicles less than 50" - closed 10/15 – 5/31	0.75
417	M-08.10	Motorized Trail - vehicles less than 50" - closed 10/15 - 6/30	2.76
417-NEW	New construction		0.23
417-NEW	New construction		0.39
417-NEW	New construction		0.35
417-NEW	New construction		0.87
417-NEW	New construction		1.29
440	M-08.10	Motorized Trail - vehicles less than 50" - closed 10/15 - 6/30	0.87
467	M-08.10	Motorized Trail - vehicles less than 50" - closed 10/15 - 6/30	8.70
467-NEW	New construction		0.37
467-NEW	New construction		1.08
467-NEW	New construction		0.97

Alternative 4 – Proposed Motorized Trails			
Trail Name	Code	Definition	Miles
467-NEW	New construction		0.85
467-NEW	New construction		0.29
467-NEW	New construction		0.70
467-NEW	New construction		0.23
467-NEW	New construction		0.90
601-001	M-07.00	Motorized Trail - vehicles less that 50" - no seasonal restrictions	0.60
601-002	M-07.00	Motorized Trail - vehicles less that 50" - no seasonal restrictions	0.34
626-A1	M-08.105	Motorized Trail - vehicles less than 50" - closed 10/15 – 5/31	1.37
626-B1	M-08.105	Motorized Trail - vehicles less than 50" - closed 10/15 - 5/31	0.92
626-C1	M-08.105	Motorized Trail - vehicles less than 50" - closed 10/15 – 5/31	0.24
U-015	M-08.00	Motorized Trail - vehicles less than 50" - closed 9/1-6/30	1.46
U-020	M-08.00	Motorized Trail - vehicles less than 50" - closed 9/1-6/30	4.97
U-027	M-08.00	Motorized Trail - vehicles less than 50" - closed 9/1-6/30	1.41
U-028	M-08.00	Motorized Trail - vehicles less than 50" - closed 9/1-6/30	0.40
U-034	M-08.00	Motorized Trail - vehicles less than 50" - closed 9/1-6/30	1.15
U-035	M-08.00	Motorized Trail - vehicles less than 50" - closed 9/1-6/30	2.27
U-1841	M-08.10	Motorized Trail - vehicles less than 50" - closed 10/15 - 6/30	0.27
U-403	M-08.105	Motorized Trail - vehicles less than 50" - closed 10/15 – 5/31	1.54
U-4128	M-08.10	Motorized Trail - vehicles less than 50" - closed 10/15 - 6/30	0.38
U-427	New construction		0.61
U-449	M-08.00	Motorized Trail - vehicles less than 50" - closed 9/1-6/30	0.17
U-NEW4	New construction		0.83
U-NEW-4043	New construction		0.09
U-NEW-4090	New construction		0.38
U-NEW-4090-C	New construction		0.09
U-NEW6	New construction		0.57
Total		Approxim	nately 63 miles

Table C- 9. Existing non-motorized trail system for alternative 1

Alternative 1 – Existing Non-motorized Trails			
Trail Name	Code	Definition	Miles
405	NOMTR	Non-motorized trail	2.19
420	NOMTR	Non-motorized trail	2.86
438	NOMTR	Non-motorized trail	3.97
440	NOMTR & NM	Non-motorized trail	31.69
466	NOMTR	Non-motorized trail	5.02
477	NOMTR	Non-motorized trail	2.25
481	NOMTR	Non-motorized trail	1.41
482	NM	Non-motorized trail	4.29
483	NM	Non-motorized trail	3.83
487	NOMTR	Non-motorized trail	2.75
488	NM	Non-motorized trail	2.49
490	NOMTR	Non-motorized trail	4.59
493	NOMTR	Non-motorized trail	1.68
U-1827	NM	Non-motorized trail	1.91
Total			Approximately 71 miles

Table C- 10. Proposed non-motorized trail system for alternative 2

	Alternative 2 – Proposed non-motorized trails			
Trail Name	Code	Definition	Miles	
329-J1	NM	Non-motorized trail	0.24	
401	NM	Non-motorized trail	1.68	
404	NM	Non-motorized trail	3.99	
405	NOMTR	Non-motorized trail	2.19	
4106-H1	NM	Non-motorized trail	0.56	
4106-H3	NM	Non-motorized trail	0.37	
418	NM	Non-motorized trail	3.98	
420	NOMTR	Non-motorized trail	2.86	
438	NOMTR	Non-motorized trail	3.97	
440	NOMTR & NM	Non-motorized trail	31.69	
466	NOMTR	Non-motorized trail	5.02	
477	NOMTR	Non-motorized trail	2.25	
481	NOMTR	Non-motorized trail	1.41	
482	NM	Non-motorized trail	4.29	
483	NM	Non-motorized trail	3.83	
485	NM	Non-motorized trail	4.13	
487	NOMTR	Non-motorized trail	2.75	
488	NM	Non-motorized trail	2.49	
490	NOMTR	Non-motorized trail	4.59	

Alternative 2 – Proposed non-motorized trails			
Trail Name	Code	Definition	Miles
493	NOMTR	Non-motorized trail	1.68
607-61	NM	Non-motorized trail	1.20
771-A3	NM	Non-motorized trail	0.64
U-117	NM	Non-motorized trail	0.63
U-1827	NM	Non-motorized trail	1.91
U-447	NM	Non-motorized trail	0.77
U-NEW-1006	NEW CONSTRUCTION		0.38
Mountain Bike Trails	NEW CONSTRUCTION		31.0
Total			Approximately 120 miles

Table C- 11. Proposed non-motorized trail system for alternative 3

	Alternative 3 – Proposed Non-motorized Trails			
Trail Name	Code	Definition	Miles	
1879	NM	Non-motorized trail	1.54	
329-J1	NM	Non-motorized trail	0.24	
401	NM	Non-motorized trail	1.68	
404	NM	Non-motorized trail	3.99	
405	NOMTR	Non-motorized trail	2.19	
4106-H1	NM	Non-motorized trail	0.56	
4106-H3	NM	Non-motorized trail	0.37	
418	NM	Non-motorized trail	7.10	
420	NOMTR-FS	Non-motorized trail	2.87	
438	NOMTR-FS	Non-motorized trail	3.97	
440	NOMTR & NM	Non-motorized trail	47.17	
466	NOMTR	Non-motorized trail	5.02	
467	NM	Non-motorized trail	12.87	
477	NOMTR-FS	Non-motorized trail	2.25	
481	NOMTR-FS	Non-motorized trail	1.41	
482	NOMTR-FS	Non-motorized trail	4.29	
483	NOMTR-FS	Non-motorized trail	3.83	
485	NM	Non-motorized trail	4.13	
487	NOMTR	Non-motorized trail	5.64	
488	NOMTR-FS	Non-motorized trail	2.50	
490	NOMTR-FS	Non-motorized trail	4.59	
493	NOMTR-FS	Non-motorized trail	1.69	
607-C1	NM	Non-motorized trail	1.20	
771-A1	NM	Non-motorized trail	0.10	
771-A3	NM	Non-motorized trail	0.64	
U-117	NM	Non-motorized trail	0.63	
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Alternative 3 – Proposed Non-motorized Trails			
Trail Name	Code	Definition	Miles
U-1827	NM	Non-motorized trail	1.91
U-4128	NM	Non-motorized trail	0.38
U-447	NM	Non-motorized trail	0.77
U-771-A1	NM	Non-motorized trail	0.11
U-NEW-1006	NEW CONSTRUCTION		0.38
Mountain Bike Trails	NEW CONSTRUCTION		31.00
Total			Approximately 158 miles

Table C- 12. Proposed non-motorized trail system for alternative 4

Alternative 4 – Proposed Non-motorized Trails				
Trail Name	Code	Definition	Miles	
1892-D3	NM	Non-motorized trail	0.57	
329-J1	NM	Non-motorized trail	0.09	
401	NM	Non-motorized trail	1.68	
404	NM	Non-motorized trail	3.99	
405	NOMTR	Non-motorized trail	2.19	
418	NM	Non-motorized trail	7.11	
420	NOMTR-FS	Non-motorized trail	2.87	
438	NOMTR-FS	Non-motorized trail	3.98	
440	NOMTR & NM	Non-motorized trail	45.58	
440-NEW1	NM RECONSTRUCTION	Non-motorized trail relocated	0.15	
440-NEW2	NM RECONSTRUCTION	Non-motorized trail relocated	0.61	
440-NEW3	NM RECONSTRUCTION	Non-motorized trail relocated	2.11	
466	NOMTR	Non-motorized trail	5.02	
477	NOMTR-FS	Non-motorized trail	12.87	
481	NOMTR-FS	Non-motorized trail	1.41	
482	NOMTR-FS	Non-motorized trail	4.29	
483	NOMTR-FS	Non-motorized trail	3.83	
485	NM and NOMTR	Non-motorized trail	4.13	
487	NOMTR	Non-motorized trail	2.75	
488	NOMTR-FS	Non-motorized trail	2.50	
490	NOMTR	Non-motorized trail	4.60	
493	NOMTR	Non-motorized trail	1.69	
607-C1	NM	Non-motorized trail	1.20	
771-A1	NM	Non-motorized trail	0.10	
771-A3	NM	Non-motorized trail	0.64	
U-117	NM	Non-motorized trail	0.63	

Alternative 4 – Proposed Non-motorized Trails				
Trail Name	Code	Definition	Miles	
U-1827	NM	Non-motorized trail	1.91	
U-447	NM	Non-motorized trail	0.77	
U-771-A1	NM	Non-motorized trail	0.11	
U-NEW-1006	NEW CONSTRUCTION		0.38	
U-NEW-1892	NEW CONSTRUCTION		0.50	
Mountain Bike Trails	NEW CONSTRUCTION		20	
Total			Approximately 130 miles	

## **Appendix D – Cumulative Effects**

## Past, Present and Foreseeable Future Actions Relevant to the Blackfoot Travel Plan

Cumulative impact is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes the action (40 CFR 1508.7).

The baseline used for cumulative effects analysis is the current condition. The cumulative effects analysis, while including some consideration of past human actions, does not fully quantify all effects of past human actions by calculating all prior actions on an action-by-action basis. By looking at current conditions, we are sure to capture residual effects of past human actions and natural events, regardless of which particular action or event contributed those effects. The Council on Environmental Quality issued an interpretive memorandum on June 24, 2005, regarding analysis of past actions, which states, "agencies can conduct an adequate cumulative effects analysis by focusing on the current aggregate effects of past actions without delving into the historical details of individual past actions." The cumulative effects analysis in this EIS is also consistent with Forest Service NEPA Regulations (36 CFR 220.4(f)). For these reasons, while some past actions are listed and considered, the focus of the cumulative analysis is based on current environmental conditions.



figure d- 1). These 5<sup>th</sup> code HUCs are further divided into smaller 6<sup>th</sup> code HUCs (there are thirty-four 6<sup>th</sup> code HUCs in the planning area), which are described in more detail in the hydrology section of chapter 3. Of this 611,000-acre acre, approximately 292,000 acres fall within the Helena Forest boundary and are comprised of private, state and National Forest System land, as displayed in the following table.

Table D- 1. HUC 5 acreage by land ownership with	n the Helena NF boundary
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Ownership	Acres	Percent
Blackfoot River Headwaters	56,511	
Private	4,825	8
State	560	1
Forest Service	51,125	91
Blackfoot River-Keep Cool Creek	90,745	
Private	2,320	3
Forest Service	88,425	97
Landers Fork	54,801	
Private	275	1
Forest Service	54,525	99
Little Prickly Pear Creek	204	
Forest Service	204	100

Ownership	Acres	Percent
Lower Dearborn River	5,292	
Forest Service	5,292	100
Lower Little Blackfoot River	317	
Forest Service	317	100
Lower North Fork Blackfoot River	6,652	
Private	2	<1
State	645	10
Forest Service	6,005	90
Middle Fork Dearborn River	4,922	
Private	2,441	50
Forest Service	2,481	50
Nevada Creek	40,315	
Private	1,536	4
Forest Service	38,778	96
Upper Little Prickly Pear Creek	32,324	
Private	3,139	10
State	691	2
Forest Service	28,493	88
Total acres within Helena National Forest boundary		Approximately 292,000 acres
Total acres of all HUC 5 watersheds with portions that fall within planning boundary		Approximately 611,000 acres

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figure d-1) and focused on the portions of this within the Forest boundary (292,000 acres) for the cumulative impact analysis area because of the potential for impacts of multiple actions on the natural environment, particularly hydrologic resources, within the same drainage area. However, the area of cumulative impact may differ depending on the resource affected. If a different cumulative impact area is chosen for a specific resource, we discuss this in that specific resource section in chapter 3.

A catalog of certain actions relevant to roads and road use (ones that are contributing effects to affected resources analyzed) occurring within this cumulative impact analysis area is shown in table D2 that follows. In progress or planned actions, known as of this writing, are also included and were compiled from the "Helena National Forest Schedule of Proposed Actions" (October 2012 and September 2013) and input from district and forest staff.

The "Affected Environment" sections for each resource in chapter 3 discuss the current conditions in the planning area, including the transportation section which briefly discusses a history of past road/trail construction and use in the area. Cumulative watershed effects analysis assumes all planned projects have been completed.

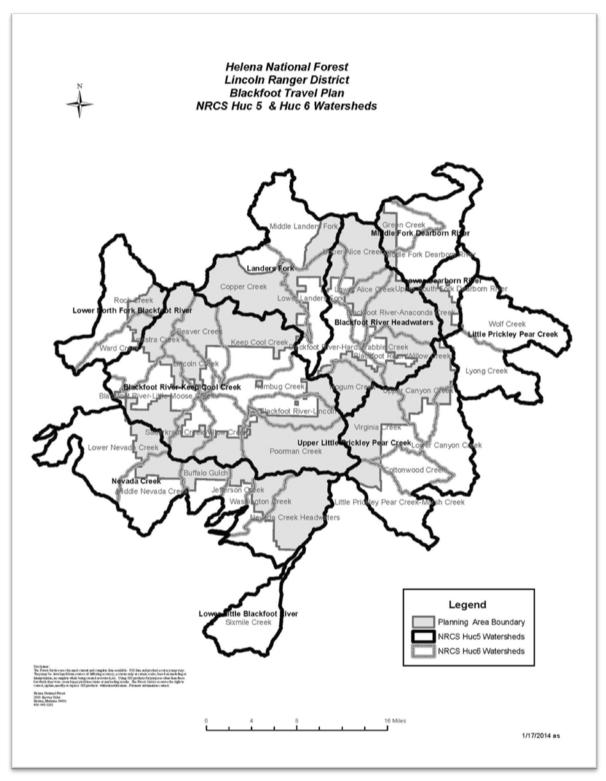


Figure D- 1. Blackfoot Travel Plan cumulative effects displaying HUC 5 and HUC 6 watersheds

Table D- 2. Past, planned and ongoing activities within or near the Blackfoot Travel Plan cumulative impact analysis area

Activity	Type/Description	Timing	5th code HUC	Acres/Miles within 5th code HUC		
Ongoing or Planned Project	Ongoing or Planned Projects within Cumulative Impact Analysis Area					
Alice Creek Wildlife Enhancement Project	Big game winter range improvements through reducing conifer encroachment within native grasslands. In addition to creating and maintaining natural openings and improving stand structure, burning will improve forage quality and quantity	2014	Blackfoot River Headwaters & Middle Fork Dearborn River	2803 acres in Blackfoot River Headwaters 18 acres in Middle Fork Dearborn River		
Baldy Mountain Sampling	Materials sampling along FS Rd. 1826.	2013	Blackfoot River-Keep Cool Creek	<1		
Blackfoot - North Divide Winter Travel Planning	Development of a winter travel plan for the Lincoln Ranger District in order to provide a variety of motorized and non- motorized winter recreation opportunities.	2014	All	Essentially the same planning area as Blackfoot Non-Winter Travel Plan		
Colby #1 & #2 Placer Project	Placer sampling activities at 6 locations within this unpatented mining claim in Washington Gulch (no in-stream sampling)	2013	Nevada Creek Headwaters	<1		
Cougar #1, 2 Lode Sampling	Sample material removal from two collapsed portals to be dug out using Bobcat & hand tools and closed using a wooden structure that can be locked. Some minor road work for access possible.	2013	Upper Little Prickly Pear Creek	<1		
Dalton Mountain Forest Restoration and Fuels Reduction Project	Vegetation management project to address forest stand health and fuel hazards associated with mountain pine beetle infestation	2016	Blackfoot River-Keep Cool Creek & Nevada Creek	10,670 acres in Blackfoot River-Keep Cool Creek 7,750 acres in Nevada Creek		
Granite Butte Whitebark Pine Restoration Project	Whitebark pine seedling planting within the boundary of the 2010 Davis fire	2012	Upper Little Prickly Pear Creek	1,967 acres		
Helmville Face Wildlife	Prescribed fire project to restore the role	2015	Blackfoot River-Keep Cool Creek	1,644 acres in Blackfoot		

Activity	Type/Description	Timing	5th code HUC	Acres/Miles within 5th code HUC
Enhancement Project	of fire; create and maintain natural openings; improve stand structure; and improve wildlife forage quality and quantity		and Nevada Creek	River-Keep Cool Creek 8,853 acres in Nevada Creek
South Fork Poorman Creek Fish Improvement/Road Reroute	Relocate 2300 feet of county road and phone line to improve aquatic and fish habitat by reducing sediment into South Poorman Creek	2012	Blackfoot River-Keep Cool Creek	0.34 miles
Stonewall Project	Vegetation management project to respond to mountain pine beetle outbreaks, maintain and improve viable mature habitat structure to support big game and other wildlife, promote resiliency with a mosaic of species, reduce fire hazard and potential, and provide timber products	2016	Blackfoot River-Keep Cool Creek	24,006 acres
Stonewall Creek Restoration	Stream and riparian restoration project designed to improve floodplain and instream conditions of Stonewall Creek by removing large placer piles and stabilizing streambanks. The result of proposed restoration activities would help restore the physical and ecological functioning of Stonewall Creek. Specifically, habitat for westslope cutthroat trout would be improved.	2014	Blackfoot River-Keep Cool Creek	0.8 miles
Sauerkraut Creek Restoration	Stream and riparian restoration project includes relocation and restoration of an 1150 foot reach of Sauerkraut Creek that has been highly modified by past mining . This project would: restore the appropriate channel and floodplain dimensions to improve aquatic habitat conditions and overall ecosystem resiliency of approximately 1,000 feet of channel; restore a total of 2.1 acres of riparian floodplain; re-establish a	2017	Blackfoot River-Keep Cool Creek	0.2 miles

Activity	Type/Description	Timing	5th code HUC	Acres/Miles within 5th code HUC
	vegetated and connected floodplain, thereby, increasing aquifer storage and late season release of groundwater; and, impact 115 feet (10%) of the Wall by partial or complete plug fills, while preserving the remaining 750 feet as is.			
Hogum Wildlife Enhancement Project	Improve big game winter range habitat by reducing conifer encroachment and encouraging forage availability by restoring the natural role of fire	2012	Blackfoot River Headwaters	1522 acres
George Kamps Private Road special use permit	Permit for motorized access across National Forest System land to private land in the Arrastra Creek areas. Proposed use of approximately 5.7 miles of an existing, unnumbered road that is closed to motorized public use.	2013	Blackfoot River-Keep Cool Creek	3.8 miles
Livestock Grazing	The planning area includes 15 livestock grazing allotments  1. Alice Creek 2. Arrastra Creek 3. Canyon Ck. Sandborn 4. Chimney Creek 5. East Nevada 6. East Shingle Mill 7. Gould Creek 8. Horsefly 9. Keep Cool Liverpool 10. Marsh Creek 11. Moose Creek 12. Poorman /Willow 13. Stonewall 14. Tarhead 15. West Nevada	1. 7/5 – 9/5 2. 6/1 – /30 3. 7/1 - 9/31 4. 7/1 – 9/1 5. 7/1 – 9/1 6. 7/11– 9/1 7. 7/1 – 9/30 8. 7/1 – 9/30 9. 7/1 – 9/30 10. 7/1 – 9/30 11. 7/1 – 8/31 12. 7/1 – 9/30 13. 6/29- 9/30 14. 7/1 - 9/30 15. 6/16- 8/31	<ol> <li>Middle Fork Dearborn; Landers Fork; Blackfoot River Headwaters</li> <li>Blackfoot River-Keep Cool Creek; Lower North Fork Blackfoot</li> <li>Blackfoot River Headwaters</li> <li>Nevada Creek</li> <li>Nevada Creek</li> <li>Nevada Creek</li> <li>Upper Little Prickly Pear; Balckfoot River-Keep Cool Creek</li> <li>Upper Little Prickly Pear; Blackfoot River Headwaters</li> <li>Landers Fork; Blackfoot River-Keep Cool Creek</li> <li>Upper Little Prickly Pear;</li> </ol>	1. 1829/0; 8/0; 11053/6 2. 687/5; 426/4; 3. 2603/8 4. 1986/15 5. 4370/7 6. 1415/5 7. 1/0; 2482/7 8. 20/0; 5179/11 9. 1052/9; 7482/29 10. 3363/6; 16/0 11. 4072/25; 3439/23 12. 9773/41; 276/1 13. 2000/15 14. 2654/6; 20/0 15. 166/4; 7357/38

Activity	Type/Description	Timing	5th code HUC	Acres/Miles within 5th code HUC
			Blackfoot River-Keep Cool Creek  11. Blackfoot River-Keep Cool Creek; Nevada Creek  12. Blackfoot River-Keep Cool Creek; Nevada Creek  13. Blackfoot River-Keep Cool Creek  14. Upper Little Prickly Pear; Blackfoot River Headwaters  Blackfoot River-Keep Cool Creek; Nevada Creek	
Forestwide Hazardous Tree Removal and Fuels Reduction HFRA Project	Individual tree removal from roadsides to minimize large-scale wildfire threats and improve public safety along roadways	Ongoing	Vario	us
Campgrounds, recreation sites, day use areas, & rental cabin operations and maintenance	Routine operation and periodic maintenance on designated campgrounds and their facilities and roads	Ongoing	Vario	us
Mining Activity	Overall, permitted mining activity on the Lincoln Ranger District in recent years has been limited to small operations with mainly hand work.	Ongoing	Vario	us
Noxious Weed Treatment	Herbicide treatment is primarily along roads and in patches that are accessible to mechanized equipment (spraying with ATVs) and/or by hand, biological (insects), goats/sheep, and aerial spraying.  Areas for treatment are as identified in the EIS/ROD and continually being	Ongoing	Vario	us

Activity	Type/Description	Timing	5th code HUC	Acres/Miles within 5th code HUC
	updated and treated as new infestations are located.			
Lincoln Ranger District Administrative Site	Humbug Creek HUC 110 acres	Ongoing	Blackfoot River-Keep Cool Creek	110 ac
Outfitting	Outfitter and guide special use permits for big game and spring bear seasons, day use and overnight camping.	Ongoing	Various	
Road & Trail Routine Maintenance	Routine maintenance includes blading, brushing, culvert cleanout, etc. Use of Forest Roads varies by route and season	Ongoing	Vario	us
Utility Special Use Permits	Utility lines are authorized under the terms of a special use permit. Routine maintenance are accepted and understood under the terms of the permit.	Ongoing	Various	
Road Special Use Permits	Re-issuance of existing road access permit for long-term.	Ongoing	Vario	us
Personal use firewood cutting.	Dead trees with approximately 100 feet of existing travel routes within the analysis are being removed by the public for firewood.	Ongoing	Various	
Private Land Timber Sales	Unspecified acres; primarily tractor logging using existing roads for hauling.	Ongoing	Vario	us
Private Land Development	Development for housing in several areas in the vicinity of the town of Lincoln.	Ongoing	Various Various	
Alice Creek prescribed burn	Prescribed burning to improve forest health and reduce the threat of large-scale wildfire	Ongoing	Blackfoot River Headwaters and Middle Fork Dearborn River	3,275 acres in Blackfoot River Headwaters  56 acres in Middle Fork Dearborn River
Poorman prescribed burn	Prescribed burning to improve forest health and reduce the threat of large-	Ongoing	Blackfoot River-Keep Cool Creek	837 acres

Activity	Type/Description	Timing	5th code HUC	Acres/Miles within 5th code HUC
	scale wildfire			
Road projects ARRA-2010 and 2011	Replacement of the Nevada-Ogden Bridge and Lincoln area roads maintenance	2010 and 2011	Various	
Stonewall	wildfire	2012		10 acres
EF	wildfire	2012		4700 acres (primarily within Scapegoat Wilderness)
Mike Horse Upper Blackfoot Mining Complex	Large scale reclamation project	2013-2018	Headwaters Upper Blackfoot River	30 acres
Summary of Past Activities	s (Pre-2010) within Cumulative Impact An	alysis Area		
Timber harvest (NFS and state/private land)	Vegetation management activities to improve forest health and achieve other Forest Plan objectives	Pre-2010	Various	
Fire/Fuels treatments	Prescribed burning and forest thinning to prevent large-scale wildfire	Pre-2010		
Livestock grazing	Grazing of cattle, sheep and horses	Pre-2010		
Mining	Small scale hard rock mining	Pre-2010		
Other Relevant Activities C	Outside Cumulative Impact Analysis Area	1		
Divide Travel Plan	In-progress travel management analysis covering summer and winter motorized use	2013		
South Belts Travel Plan	Travel management analysis covering summer and winter motorized use	complete		
North Belts Travel Plan	Travel management analysis covering summer and winter motorized use	complete	Not Applicable	
Clancy-Unionville Travel Plan	Travel management analysis covering summer and winter motorized use	complete		
Elkhorns Travel Plan	Travel management analysis covering summer and winter motorized use	complete		
Cellar-Ogilvie (Soundwood) Travel Plan	Travel management analysis covering summer and winter motorized use	complete		



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# Appendix E – Wildlife

# Methodologies and Assumptions

The following table shows the assumptions, information used, methodologies and scientific accuracy applied to wildlife parameters:

Table E- 1. Wildlife parameters

Wildlife Parameter	Assumptions And Information Used	Methodologies And Scientific Accuracy
General Habitat	Information on wildlife and wildlife habitat in the Blackfoot Travel Plan Area has been extracted from field survey work throughout the landscape. Some of this information is summarized in the Blackfoot Landscape Analysis (HNF 1995) and in environmental analyses conducted for a variety of projects across the landscape. I have also employed recent modeling and map work by HNF GIS specialists.  This section focuses on the direct effects of roads on forest, riparian, and grassland/shrubland habitat (habitat loss, fragmentation, edge effects). Edge effects are described for roads but not for trails. This derives from the observation that most trails on the HNF are narrow tracks that produce little, if any measurable edge. That is, trails in forest habitat run under the canopy rather than scouring out a contrasting corridor through the surrounding habitat. As a result, edge effects associated with these narrow travelways are assumed to be negligible.	Because wildlife species composition in any given area is primarily a product of available habitats, most wildlife is discussed at the "coarse filter" scale. That is, we assume that broad groups of similar vegetation will support similar arrays of wildlife species and levels of biodiversity (absent specific limiting factors generated by human interference or natural factors). Likewise, we assume that roads in each of these broad vegetation types will affect associated wildlife communities in similar ways. In some cases, individual species and their specific habitat needs are discussed—especially in the case of uncommon species dependent on particular habitat components for which data is available. This is a "fine filter" approach. Effects on general habitat are discussed in terms of habitat loss, fragmentation, and edge effects.
Old-Growth Forest	Information used to model old-growth is described in the documentation file created by HNF GIS specialists [Project File]. Modeling is based on sampling for the timber stand data layer (part of the Master Vegetation Layer). Effects generated by roads in old growth forest are assumed to be similar to those that occur in forested habitat in general.	Direct effects of roads are discussed briefly with regard to fragmentation, habitat loss (particularly with regard to snags), and edge effects. These data are not quantified.

Wildlife Parameter	Assumptions And Information Used	Methodologies And Scientific Accuracy
Riparian Habitats	Information used to assess effects on riparian habitat is based on data summarized in the Fisheries and Watershed Specialist Report and analyses conducted by HNF GIS specialists. We assume that these assessments are sufficient to indicate effects on these focal habitat sites that are important not only to species of special concern (such as western toads) but to a wide variety of wildlife.	Methodologies for assessing effects of motorized use within the 300 foot riparian zone (Riparian habitat conservation Areas) are described in the Fisheries and Watershed reports. This analysis reports miles of open road expected in these riparian areas under different alternatives.
Landscape Connectivity	The size and distribution of habitat patches away from the influence of open roads is used as a general indicator for comparing differences among alternatives. Assumptions used were that the fewer and larger the unroaded patches, the better the connectivity (the less the fragmentation). Better connectivity may be partially a function of lower road density alone, but primarily it reflects patterns of open road dispersion (regardless of density) that allow ample blocks of wildlife habitat to function free from road influences.	This assessment focuses on size and distribution of areas free from vehicle use. All unroaded and non-motorized patches larger than 1,000 acres are tallied, and changes between alternatives calculated. This gives a general sense of relative differences between alternatives.
Snags and Downed Logs	Primary information sources and assumptions are summarized in Bate and Wisdom (2002a, 2002b) and Hillis et al. (2003). Additional information and assumptions are described in the text files and analyses run by HNF GIS specialists [project file]. In analyzing woody debris, I assume that effects are qualitatively similar for all 3 alternatives since the 300-foot rule for off-road camping applies in each case, and opportunities for firewood cutting are similar.	The methodology used to analyze indirect effects on snags and logs is described in the Snags and Downed Logs section. Indirect effects on snags and logs related to "edge" created by road prisms remaining on the landscape are described in the General Habitat section.
Motorized Use within 300 feet of Open Roads and Trails	Analyses by HNF GIS specialists yielded road miles. Effects apply to all open motorized routes regardless of habitat type. Effects on riparian habitat are analyzed by Riparian Habitat Conservation Areas (RHCA), which are buffers along stream corridor areas that	Open route miles ("open" to wheeled vehicles) are used to determine habitat effects generated by motorized use within 300-feet of the routes. Any road that is open at any time of the year is included as an open route.

Wildlife Parameter	Assumptions And Information Used	Methodologies And Scientific Accuracy
	vary from 150 to 300 feet wide on either side of streams.	The expectation was that relatively few new sites would be exploited within the 300-foot area, as most good camping/parking areas already have a road to them. The same is expected for the Blackfoot Travel Plan area as this area has a legacy of dispersed use.
Elk	Elk herd units (EHUs) were delineated by Helena National Forest (HNF) and Montana Fish, Wildlife and Parks (MFWP) biologists in 2003 and modified in 2007 and 2011. Herd units extend 1.5 mi beyond HNF boundaries, which we assume accounts for the area used by most elk that regularly move on and off the Forest in winter. Elk analyses described in "Methodologies" are based on the road attribute layers for each alternative.  Summer range is assumed to be the entire herd unit (though this is often an overestimation). Hiding cover—which underlies the Forest Plan standard for elk summer range quality—is based on modeling by HNF GIS analysts (USDA 2009).  Winter range was delineated using the layer for the HNF Oil and Gas Leasing EIS (1995). I chose this delineation after comparing plots of several thousand winter elk locations (from MFWP aerial surveys and radio-telemetry) to 3 available winter range maps—"Forest Plan" (1981-86), "Oil and Gas" (1995), and MFWP (1999-2010). The "Oil and Gas" map covered 96% of winter elk locations within herd units. I used the more broadly defined MFWP winter ranges when discussing elk habitat use and movement patterns beyond the HNF.  A Forest Plan amendment associated with this travel plan would substitute elk security areas for the former hiding cover/road density index as a measure of elk security in the fall. Field research suggests that the security area methodology is the more accurate and sensitive of the two measures. Information on elk populations and seasonal distribution is based primarily on annual survey work by MFWP (including aerial census and check-station data), but also from past MFWP radio telemetry studies.	Methodologies used to determine direct and indirect effects on elk include the following:  Summer Habitat Effectiveness (Christensen et al. 1993) is based on open road density within each elk herd unit (including private roads) between May 16 and Sept. 30.  Road locations and vehicle use patterns have been verified on the ground to the extent possible.  Modeling of hiding cover (for Forest Plan compliance) provides a reasonably accurate estimate of % cover over broad areas, but it is not useful for drawing local, site-specific conclusions as to elk habitat use.  Effects of travel management on winter range are based on open road and over-snow vehicle trail patterns on "HNF Oil and Gas ElS winter range" within HNF boundaries and on "MFWP winter range" in the 1.5 mile herd unit extension beyond those boundaries. Assessment of over-snow vehicle use comes from the most recent Forest over-snow vehicle trail maps and verification from discussion with local over-snow vehicle groups that regularly use the trail system.  The security analysis for the programmatic amendment, Alternative B, was developed through discussions with MFWP, input from public comments, and the U.S. Forest Service and Montana Department of Fish, Wildlife, and Parks Collaborative Overview and Recommendations for Elk Habitat Management on the Custer, Gallatin, Helena, and Lewis and Clark National Forests (MFWP and USDA Forest Service 2013). Security is defined as a proportion of an elk herd unit within the administrative boundary of the Lincoln Ranger District that consists of an area of at least 1000 acres in size that is at least 0.5 mile from a motorized route open to the public between 9/1 and 12/1. Security blocks do not include constrictions less than or equal to ½ mile in width. Security is calculated across all ownerships within the

Wildlife Parameter	Assumptions And Information Used	Methodologies And Scientific Accuracy
		administrative boundary. Private land inholdings within the Lincoln Ranger District administrative boundary are factored into the security analysis according to the type of motorized access to those parcels. Private motorized routes are considered open for the purposes of the security analysis and are buffered by 0.5 mile. Private lands outside of the half mile buffer contribute to security if they are part of a 1,000-acre area or greater. Inholdings without roaded access count towards elk security if the minimize size criteria of 1,000 acres is met.
	Threatened and Endangered Specie	s
Canada Lynx	The Northern Rockies Lynx Management Direction (NRLMD) (USDA 2007b) provides the background information, standards, guidelines, and general management direction for lynx. Potential lynx habitat was modeled by HNF GIS personnel using a combination of data from the timber stand management record system (TSMRS) (field-based stand data) and V-Map satellite imagery (USDA 2009) and then overlaid on the GIS roads layer to determine route miles in lynx habitat [documented in the Project File]. Much of the background information for interpreting results of field surveys and modeled habitat data has come from the Lynx Science Report (USDA 1999), the Lynx Conservation Assessment and Strategy (Ruediger et al. 2000), and The Scientific Basis for Conserving Forest Carnivores (USDA 1994).	Area-wide distribution of potential lynx and snowshoe hare habitat has been modeled and mapped by HNF GIS personnel, using criteria from the NRLMD. Field-based information for validating habitat modeling efforts has come from a variety of sources—including general wildlife surveys that have made note of habitat components useful to lynx throughout the landscape, lynx habitat surveys conducted for the Stonewall and Dalton vegetation projects, and on-going Forest-wide field surveys of potential snowshoe hare habitat conducted according to Regional protocols.  Planning area information on lynx and lynx habitat has also come from research headed by John Squires with the Rocky Mountain Research Station in 2000-2002 and again in 2011-2013, Wild Things Unlimited has conducted track surveys and collected DNA in the planning area since 2010, and FS personnel have conducted SW Crown winter carnivore surveys in the planning area since the winter of 2011/2012. We have also made use of track survey transects run regularly by MFWP for several years, as well as observations from, hunters, trappers, and houndsmen.
Grizzly Bear	Basic guidance for grizzly bear management comes from the Grizzly Bear Recovery Plan (USDI 1993), the Interagency Grizzly Bear Committee (IGBC) Guidelines (1986), and the Grizzly Bear Management Plan for Western Montana (MFWP 2006). Application of this direction is modified by ongoing research, the slow expansion of occupied grizzly range southward across the	The NCDE Access Management Protocol (2008) moving windows analysis was used to analyze motorized access within the NCDE recovery zone. Open road densities were calculated for consistency with the FP standard.in occupied habitat and also for the remainder of the planning area lands. Within the distribution zone security areas for elk (i.e. areas

Wildlife Parameter	Assumptions And Information Used	Methodologies And Scientific Accuracy
	HNF, and the development of updated management documents. The Travel Plan Area north of MT Highway 200 lies within the Northern Continental Divide Ecosystem (NCDE) Grizzly Bear Recovery Zone. The Travel Plan area south of Highway 200 is within the Grizzly Bear "Distribution Zone" that was delineated in 2002. Based upon numerous reports and observations of grizzly bear occurrences in the distribution zone grizzly bears are assumed to occur throughout the entire project area.	>1,000 acres in size, >0.5 miles from an open road were used as a general measure of grizzly bear habitat security. Information on distribution of grizzly bears and suitable habitat components across the Blackfoot landscape has been derived from wildlife surveys by HNF biologists since the early 1990s, data from MFWP, and observations by field-going personnel and Forest-users. Criteria outlined in the Grizzly Bear Recovery Plan and the IGBC Guidelines served as the basis for analysis.
	Sensitive Species	
Northern Rocky Mountain Gray Wolf	U.S. Fish and Wildlife Service (USFWS) and MFWP biologists as well as HNF biologists work cooperatively to identify the status of wolves in the Blackfoot landscape. Much of this data has been documented in <i>Montana Wolf Program Weekly Reports</i> and <i>Rocky Mt. Wolf Recovery Annual Reports</i> (USFWS, MFWP 1995-2012). Other information has come from field observations by HNF biologists, HNF field crews, local residents, and other Forest users. More recently, we have garnered data from tracking surveys by Wild Things Unlimited (Bozeman, MT). Since the wolf has been delisted, the MDFWP has had quota hunting seasons in 2009, and 2011- 2013. In 2012, trapping was also allowed since the quota was not filled the first two seasons through hunting alone. During the first year of combined hunting and trapping the total wolf harvest remained below the quota (MDFWP 2012).	In 2012 six documented wolf packs had territories overlapping the planning area. Information on the whereabouts of wolves, wolf dens, and rendezvous sites has come mostly from fieldwork by MFWP, actions by USDA Wildlife Services, cooperative winter tracking surveys between the Lincoln RD and MDFWP, and various other reports. These efforts have included aerial and ground-based radio telemetry. In determining effects, we made use of information from MDFWP, USFWS, research, and local sources Constant monitoring of the wolf population (by MFWP) results in periodic population estimates that are precise and accurate. Statewide wolf counts, however, tend to underestimate the total population, given its size and distribution: Recent Gray Wolf Annual Reports by MFWP (2010-2012) discuss methodologies employed to get at the actual size and configuration of the wolf population.
Wolverine	Information and assumptions used to analyze effects on wolverine are documented in Hillis and Kennedy (2003) and center on modeled natal and potential denning habitat. Since wolverines are most vulnerable to disturbance during the winter denning period in late winter and early spring, Primary source of human disturbance comes from snowmobiles, see Blackfoot winter travel project for a more detailed analysis.  The majority of modeled habitat occurs within the scapegoat wilderness and along the northern edge of the planning area.  Wolverines are often associated with large blocks of unroaded country with minimal human presence, these areas are important	Effects on wolverine natal denning habitat typically come from snowmobile activity around den sites (Hillis and Kennedy 2003). Since the current Regional habitat model has not identified any wolverine denning habitat in the Blackfoot landscape. Recent information on wolverines in the Blackfoot landscape has come from winter tracking surveys by Wild Things Unlimited coupled with DNA analysis by the USFS Rocky Mt. Research Station. Other field observations have been come from FS and MFWP biologists, other FS fieldworkers, local residents, recreationists, and trappers. There are no definitive population estimates within the

Wildlife Parameter	Assumptions And Information Used	Methodologies And Scientific Accuracy
	to wolverine population viability. Assessment of unroaded habitat has employed information from elk security area analysis, grizzly bear habitat analysis, and corridor/linkage zone analysis—each of which measures the size and arrangement of unroaded habitat blocks in a somewhat different way.	planning area.
Fisher	Analysis of the fisher is based primarily on literature review. Habitat has been modeled by the HNF GIS shop (USDA 2009) and intermittently field-checked during general wildlife surveys. There is also a draft R1 model (May 2012) that was also reviewed for this project. Observations of fishers in this landscape have been so rare that little is known of their local distribution, numbers, or status as residents/transients. Although we have been able to identify potential pockets of suitable habitat, we have been unable to make useful estimates of local population size. Since research indicates that fishers do not shy away from Forest roads, road impacts are indirect—from access provided to trappers and to firewood cutters who remove large snags of use to fishers.	The methodology employed was to compute new road/trail construction miles in modeled fisher habitat (via GIS) and then calculate acres within the 600-foot wide road corridor from which firewood cutters could remove large snags and logs potentially useful to fishers. Annual surveys conducted on the HNF by Wild Things Unlimited since 2006, have not detected fishers. Hair snag surveys in 2008 did detect two individual fishers along the western portion of the planning area. Subsequent FS hair snare surveys conducted by FS personnel in 2011 and 2012 failed to detect fisher in either the Lincoln or Seeley RD. Reports of fishers in the Blackfoot landscape have been rare, and have not been sufficient to allow an estimation of population numbers. The HNF is on the eastern edge of the distributional range of this species.
Flammulated owl	Flammulated owl habitat has been mapped via the Region-1 habitat model, which is designed to predict environments most optimal to flammulated owl nesting, roosting, and foraging. Primary source data for the model has come from research in west-side Forests—notably the Bitterroot, Lolo, and Nez Perece NFs.  The current mountain pine beetle outbreak presents habitat opportunities for flammulated owls wherever it creates large ponderosa pine snags in open forest stands away from roads. Impacts of travel management on flammulated owl are indirect—related to firewood cutting.	A tally of new road/trail construction miles in potential flammulated owl habitat (and associated road corridor acreage) across the Blackfoot landscape provides a mechanism for comparing potential indirect effects of snag removal by firewood cutters under different alternatives.
Black-backed Woodpecker	Impacts of travel management on black-backed woodpeckers are indirect—related to firewood cutting. Data used to analyze effects on habitat are derived from Hillis et al. (2002): U.S. Forest Service Region One Black-Backed Woodpecker Assessment. Other information and assumptions are described in Black-backed Woodpecker Habitat Modeling Process and in the text files and analyses run by the HNF GIS shop.	Effects of travel management on dead and dying trees in road corridors have minor implications for black-backed woodpeckers—low though their numbers may be. The methodology used to determine these effects is described in the section on Snags and Downed Logs.  While the survey and analysis methods used to characterize the dead tree resource in well-defined, accessible road

Wildlife Parameter	Assumptions And Information Used	Methodologies And Scientific Accuracy
	Woodpeckers are present in very low numbers—in pockets of old-growth, in small local burns, and within the extensive array of beetle-killed pine trees across the landscape.  The East Fork fire occurred in Scapegoat wilderness (which is outside of planning area, except for wildlife analysis) in the Fall of 2012 at 4,700 acres.	corridors have generated estimates with a high degree of precision and accuracy, the ongoing bark-beetle outbreak has produced a moving target in terms of snag density and dispersion at any given time. We can say, however, that numbers of large dead trees are increasing significantly throughout road corridors and the Travel Plan area as a whole.  No field surveys targeting black-backed woodpeckers have been conducted in the Blackfoot landscape.
Western Toad	Potential effects of roads on western toads were based on a literature review. Site specific-information for some locations—particularly riparian areas—was derived from general wildlife surveys and observations by HNF biologists.	General wildlife and fisheries surveys have made note of western toads and potential habitat for several years, but no specific methodologies to sample for amphibians have been employed across the Blackfoot landscape.
Management Indicator Spec	ies	
Pileated Woodpecker (Old-Growth Indicator)	Pileated woodpecker habitat modeling is based on Region-1 protocols. A summary of how these protocols were applied to HNF habitats can be found in " <i>Criteria for Wildlife Models HNF</i> " (USDA 2009). See also "Snags and Downed Logs" above. Information as to distribution, relative population density, and habitat use by pileated woodpeckers in the Blackfoot landscape comes from an array of wildlife field surveys and observations. Based on this information, although the woodpeckers are MIS for old-growth forest, they most often occur in non-old-growth habitats in this landscape, focusing on large trees as key habitat components.	The key components needed to characterize pileated woodpecker habitat in the Blackfoot landscape are large dead and dying trees (generally >24 inches d.b.h). The methodology for determining effects of travel management on snags is described above in the "Snags and Downed Logs" section.  Given the high mortality of mature pine trees in the current bark beetle epidemic, all stands of large trees in general (esp. ponderosa pine) are of interest since (1) all large pine are now at risk of mortality in the short term and (2) pileated woodpeckers are capable of foraging and excavating cavities in live trees if needed. As a result, HNF habitat models of pileated woodpecker habitat, which focus on stands with large mature and old-growth trees, now probably reflect more accurately the suitability of these sites to support the woodpeckers than they have in the past. A tally of new road/trail construction miles (and associated road corridor acreage) in pileated woodpecker habitat serves to indicate the relative impact of potential firewood cutting under different alternatives.
Northern Goshawk	Habitat modeled by HNF GIS specialists has been used for this analysis—the original modeling effort from 2002 having been updated (USDA 2009). Nest sites have been sought out and	Goshawks have been monitored throughout the Blackfoot landscape since the early 1990's. In recent years, protocols developed by Region 1 and adapted by the HNF have been

Wildlife Parameter	Assumptions And Information Used	Methodologies And Scientific Accuracy
(Old-Growth Indicator)	monitored since the early 1990s. Information regarding these sites is summarized in a number of reports in the LRD and HNF wildlife files.  An assumption underlying this assessment is that the existing Forest road system has relatively little direct effect on goshawks and that changes proposed under action alternatives have little impact on the ability of goshawks to effectively occupy the landscape. Continued mortality in mature pine forests from ongoing bark beetle infestation may result in some shifts in distribution of goshawk nesting sites in the near future.	applied. In 2005, large grids were sampled across the HNF as part of a Regional effort to assess goshawk distribution and population trends. In addition to these standard sampling programs, most reported goshawk sightings are followed up by less formal field exercises designed to locate active nests. Nest sites are then mapped and monitored. Field monitoring is continuing.  A tally of new road/trail construction miles in goshawk nesting and foraging habitat (and associated road corridor acreage) provides as a mechanism for comparing potential indirect effects of snag removal by firewood cutters under different alternatives. Potential disturbance of existing nest stands from opening up of currently closed roads under some alternatives provides an additional means of comparison.
Hairy Woodpecker (Snag Indicator)	Hairy woodpecker habitat modeling is based on Region-1 protocols. A summary of how these protocols were applied to HNF habitats can be found "Criteria for Wildlife Models HNF" (USDA 2009). See also "Snags and Woody Debris", above. Information as to distribution, population density, and habitat use by hairy woodpeckers in the Blackfoot landscape comes from wildlife field surveys and observations since the early 1990's HNF wildlife files. Northern Region Landbird Surveys have also provided data.  Road miles in modeled habitat and mature forest habitat come from GIS spreadsheets.  The effects of travel management are indirect—resulting from road-facilitated snag removal by firewood cutters.	Given the high mortality of mature pine trees in the current bark beetle epidemic, all mature stands with a ponderosa or lodgepole pine component now support significantly more snags than when HNF habitat models were last run. These developments, combined with a habitat model that presents a relatively narrow definition of hairy woodpecker habitat, result in an underestimate of habitat useful to these birds in the Travel Plan Area.
American Marten (Mature Forest Indicator)	Marten habitat modeling is based on Region-1 protocols. A summary of how these protocols were applied to HNF habitats can be found "Criteria for Wildlife Models HNF" (USDA 2009). See also "Snags and Downed logs", above.  Information on distribution and habitat use by marten in the Blackfoot landscape comes from general wildlife field surveys, reports from trappers, and winter tracking surveys run for many years by MFWP and more recently by Wild Things Unlimited (Gehman et al. 2009-2011) and hair snag DNA surveys by FS	As with the woodpeckers discussed above, the ongoing bark beetle infestation means that mature stands with lodgepole pine component now support significantly more snags than when HNF habitat models were last run. In the short-term, these models of potential marten habitat may now more accurately reflect the suitability of these sites to support marten. Over the long term, their suitability is likely to vary depending on the degree of remaining canopy closure and the vigor of forest regeneration.

Wildlife Parameter	Assumptions And Information Used	Methodologies And Scientific Accuracy
	personnel in winter 2011/2012.  The effects of travel management are indirect—resulting from (1) access provided trappers and (2) removal of snags and logs from the road corridors by firewood cutters.	A tally of new road/trail construction miles in potential marten habitat (and associated road corridor acreage) provides a mechanism for comparing potential indirect effects of snag removal by firewood cutters and routes available to trappers under different alternatives.



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## Appendix F – Big Game Security Forest Plan Amendment for Blackfoot Non-Winter Travel Planning

## Changes between Draft and Final

A proposed amendment was put forth in the DEIS to replace the existing Helena National Forest Big Game Standard 4(a). We received several comments on the proposed amendment (See Public Involvement, Issues, and Concerns below). After extensive review of the comments and in depth discussions with the Montana Department of Fish, Wildlife, and Parks (MFWP), we revised the original proposal for this FEIS. This revised amendment alternative along with the existing Forest Plan Big Game Standard 4(a) are analyzed in detail in this FEIS.

#### Introduction

The Blackfoot Travel Plan DEIS included a proposal to replace the existing Helena National Forest Big Game Standard 4(a) with a new standard. As part of the effort to develop the DEIS, we conducted public involvement and various outreach efforts. These efforts to gather public issues and concerns with the proposed travel plan alternatives as well as the proposed big game security forest plan amendment are summarized in the *Public Involvement* section of this FEIS in chapter 1. As part of these efforts we also held several meetings during and following the public comment period on the DEIS with the Lincoln Restoration Committee, Montana Backcountry Hunters and Anglers and others (April 15, 2013) and Montana Fish, Wildlife, and Parks (January 29, 2013, February 5, 2013, July 19, 2013, and August 27, 2013).

The comments we received on the DEIS related to the big game security amendment are summarized in appendix J and in the next section. As a result of these public comments, and indepth discussions with the Montana Fish, Wildlife and Parks (MFWP) and additional interdisciplinary team input, we revised the original amendment alternative for this FEIS. We considered several new big game security Forest Plan amendment alternatives; one of these we carried forward for detailed analysis here as Forest Plan amendment alternative B – preferred alternative, but the others were subsequently dismissed from further analysis as they did not reflect MFWP and public comments. Keeping the current big game security standard in the Forest Plan is also analyzed in detail as Forest Plan amendment alternative A. Both of these alternatives are described briefly in chapter 2 and in detail in the following sections. The big game security forest plan amendment alternative originally described in the DEIS was not carried forward for further detailed analysis in this FEIS, again, due to public comments. The rationale for this is described in more detail in the Alternatives Considered but Eliminated from Detailed Study section in chapter 2.

#### **Public Involvement**

A copy of all the public comment letters we received on the DEIS and how these letters were evaluated and considered is available in the project file but a summary of this effort is included in appendix J. Comments that were specific to the big game security forest plan amendment are shown in the table in appendix J starting with Public Comment Statement (PCS) 335 and ending with PCS 367. For ease of reference, these comments are also summarized in the table below with the location in the FEIS of where these comments are addressed. Where specific alternatives were

suggested during the public comment period related to the big game security amendment, these are also described in the *Alternatives Considered but Eliminated from Detailed Study* section of chapter 2.

Table F- 1. Comments specific to big game security index programmatic Forest Plan amendment

Summary of Comments	
Issue	Location of Response
The application of the Hillis et al. (1991) methodology in the proposed amendment in the DEIS is inappropriate	Appendix F, Alternative Discussion, Discussion Section
Do not rely so heavily on the Hillis paradigm – it has not been tested on the Helena National Forest.	Appendix F, Alternative Discussion, Discussion Section
An alternative that utilizes the Hillis definition of security as described in Hillis et al. (1991) should be developed	Appendix F, Alternative Discussion, Discussion Section
Utilizing the elk population data from MFWP's Elk Plan (2004) to determine security effectiveness rather than bull elk survival is erroneous	FEIS Chapter 3 Elk Section and Appendix F Table 3 and Factors Influencing Elk Management
There is a lack of an adequate discussion of the collaborative efforts between the FS and MFWP efforts to develop elk management recommendations	Appendix F, Alternative Discussion, Discussion section
There is a concern that cover will be eliminated as a determinant of elk security	FEIS Chapter 3 Elk Section and Appendix F Alternative Discussion, Discussion Section
Reduction in cover over time due to the mountain pine beetle must be addressed	FEIS Chapter 3 Elk Section and Appendix F, Purpose and Need, Background/Overview, and Cumulative Effects
Local information should be utilized to develop the elk security amendment	Appendix F, Alternative Discussion, Discussion Section
The Forest Service should engage in a formal review with local biologists and researchers	Appendix F, Alternative Discussion, Discussion Section
The amendment should be based on best available science	Appendix F, Alternative Discussion, Discussion Section
Consider only security areas within the National Forest boundary	FEIS Chapter 3 Elk Section and Appendix F, Alternatives Considered in Detail and Alternative Discussion, Discussion Section
Don't consider only those areas within the National Forest boundary	Appendix F, Alternatives Considered in Detail and Alternative Discussion, Discussion Section
Private land should be included in amendment methodology	FEIS Chapter 3 Elk Section and Appendix F, Alternatives Considered in Detail and Alternative Discussion, Discussion Section
The Forest should keep the current standard	FEIS chapter 3 elk section and Appendix F, Alternatives Considered in Detail
Consider large non-linear security blocks at least 1000 acres in size that are well distributed that are at least 0.5 miles from open motorized routes and separate patches with constrictions < 0.5 miles in width	FEIS Chapter 3 Elk Section and Appendix F, Alternatives Considered in Detail
The proposed amendment ignores the displacement impacts of bow hunters; it should apply to bow hunting and general hunting seasons equally in terms of motorized route closure dates (i.e.	FEIS Chapter 3 Elk Section and Appendix F, Alternatives Considered in Detail

Summary of Comments	
Issue	Location of Response
9/1 instead of 10/15)	
The Forest Service should ensure that the amendment is consistent with other Forest Plan standards	Appendix F, Alternatives Considered in Detail
The amendment must maintain big game viability	Appendix F, Table F-9
The direct effects of the amendment must be disclosed	FEIS Chapter 3 Elk Section
There is no analysis as to how the amendment would impact bull elk vulnerability	FEIS Chapter 3 Elk Section And Appendix F
There is no discussion in the DEIS as to why Standard 4(a) is not being met	FEIS Chapter 3 Elk Section and Appendix F, Background
What are the economic costs of implementing Standard 4(a)?	FEIS Chapter 3
Since there is no requirement in the new amendment to achieve the new standard, how do you measure the implementation of a non-binding standard?	Helena National Forest Plan, Chapter IV Monitoring Requirements
Please provide a discussion as to why the 40% hiding cover standard is being used rather than the hiding 90% of an elk at 200 feet	Appendix F, footnote 2
There is no discussion as to the level of total roads and levels of hiding cover that would be included in defining elk security	FEIS Chapter 3 Elk Section and Appendix F, Alternative Discussion/Discussion
The Forest Service should consider adopting a habitat effectiveness standard for areas outside of security blocks	FEIS Response to Comments Appendix J

## Purpose and Need for Amendment

The *Purpose and Need for Action* section of chapter 1 describes the overall objective of the travel plan proposal and the purpose of and need for taking action. The need statement specific to the big game security amendment is to:

 More closely align current science, local conditions, and other information with elk security needs during the hunting season that meet the intent of the Forest Plan; ensure Helena Forest Plan (USDA 1986) management direction applicable to big game security is up-to-date and based on the best available information.

The Helena Forest Plan (HFP) (USDA 1986) established standards for managing National Forest Service (NFS) road systems as a method to maintain or improve big game security during the hunting season. Under the 1986 Forest Plan, big game security is based on the relationship between open road densities during big game rifle season and the amount of hiding cover within

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<sup>&</sup>lt;sup>1</sup> Big game security in the Helena National Forest Plan is defined according to the existing hiding cover to open road density ratio and is intended to "maintain big game habitat capability and hunting opportunity" (Big Game Standard 4(a), USDA 1986, p. II/17). Security in the amendment to the existing Forest Plan Standard 4(a) is generally defined as "the area that will, during periods of hunting stress, hold elk because of geography, topography, vegetation, or a combination of those features" (Lyon and Christensen 1992) and specifically is measured as large blocks  $\geq$  1000 acres in size,  $\geq$  ½ mile from an open motorized route during the hunting season which is defined as 9/1 through 12/1. Security and vulnerability are often used interchangeably but actually reflect a causal relationship: when security is high vulnerability tends to be low, and vice-versa. Vulnerability is generally described as "a measure of elk susceptibility to being killed during the hunting season" (Lyon and Christensen 1992). See the section Concept of Elk Security for more information.

an elk herd unit (EHU). Meeting this Forest Plan standard has been problematic for several reasons. The Forest Plan was based on research conducted for the most part off-Forest in other locations (USDA 1983, p. 10). Much of the hiding cover research upon which the standard was crafted, was conducted in forests that tended to be more heavily forested than the HNF. While several of these studies acknowledge the more open terrain the further east one goes in Montana, the numeric determinant was primarily based on west side models.

Furthermore, the original analysis unit was intended to be a "habitat analysis unit" that approximated the home range of elk during the summer-fall period (10 to 40 square miles) (USDA 1978, p. 21). The HAU scale generally approximated a timber compartment unit (*Ibid*). Forest Plan Big Game Standard 4(a) provides for an analysis unit that is a "large geographic area, such as a timber sale analysis area, a third order drainage, or an elk herd unit" (USDA 1986 p. II/18). In the Blackfoot drainage, herd unit sizes range from 43 to 213 square miles; areas much larger than the original intent. Legal interpretations have confounded the Forest's ability to apply Standard 4(a) at the intended geographic scope. It's impractical to apply a standard at an area many times greater in size than the intended scope.

In the twenty eight years since the development of the Forest Plan, a substantial amount of scientific studies, surveys, and other information have accrued. Studies have suggested other measures that are also appropriate for measuring big game security, and are more closely tied to open motorized route densities during times of elk stress and increased vulnerability (i.e. hunting season). In addition, the elk harvest metrics used by the Montana Department of Fish, Wildlife and Parks (MFWP) to evaluate and manage elk vulnerability during the hunting season (the reason for providing security) have evolved, leaving part of the standard as currently written useless because it relies on data methods no longer available or in practice. As a result, public access is being constrained without the clear benefits for elk envisioned by the standard.

A programmatic Forest Plan amendment for the Blackfoot planning area is needed to more closely align current science, local conditions, and other information with elk security needs that meet the intent of the Forest Plan. A new big game security standard is needed that considers the impacts of open motorized routes on elk security, establishes blocks of secure habitat, and can be measured regardless of changes in hiding cover.

While the proposed amendment alternative B separates or decouples hiding cover from security during the hunting season, several Forestwide and management area standards remain in place that govern management of hiding cover. Application of these standards in future projects will ensure that hiding cover remains well distributed, including within security blocks.

The assumptions built into the existing (1986) standard 4(a) have not proved useful in gauging or guiding management activities under the Forest Plan. Actual elk populations and trends as monitored over the last twenty six years simply do not correlate with this existing standard or its assumptions. Elk numbers have consistently increased during this time period and the existing standard needs to be revised to address recent elk management challenges.

### Background

#### Overview

Elk serve as a management indicator for hunted species for the Helena National Forest (USDA Forest Service 1986, p. II/17). To address this, the Forest Plan contains Forestwide and management area-specific goals, objectives, and standards. The Forest Plan also provides a

description of the desired future condition which would result from carrying out planned management practices (*Ibid.* pp. II/12-14). These big game goals, objectives and standards were designed to provide habitat on the Helena National Forest to support an elk population of 6400 elk by the year 2000 in support of State of Montana<sup>2</sup> goals for harvestable elk (*Ibid.* p. V/5). There were an estimated 4900 elk on the Forest in 1981 (*Ibid.* p. V/5).

Many of the factors affecting elk numbers and distribution are beyond the control of Forest Service land managers. Examples include hunting regulations/pressure, nonhuman predation, winter kill, disease, climate change, stochastic (or natural) events, and lack of public access to hunt big game on private land (MFWP and USDA 2013, p. 3). The intent of Forest Plan goals, objectives and standards are to guide habitat management on National Forest System lands.

Forest Plan goals, objectives, and desired future conditions for wildlife, including big game are:

- Goal: Maintain and improve the habitat over time to support big game and other wildlife species (FP II/1).
- Objective: To maintain elk habitat capacity, an annual program of burning on the winter range and a road management program to decrease human disturbance (FP II/4).
- ◆ Desired Future Condition: By the end of the first decade, wildlife range will be improved to increase forage production; the wildlife potential on winter range should increase slightly while the potential on summer range should remain at current [1986] levels. By the end of the fifth decade, the Forest's ability to support elk on winter range will increase, while the ability to support elk on summer range will decrease slightly (Ibid. pp. II/12-14).

The Forest Plan contains Forestwide big game standards and big game standards specific to some of the management areas identified in the Forest Plan. These standards are summarized in the following table which includes only those management areas within the Blackfoot Travel Plan planning area for which a big game standard is in place.

Table F- 2. Forestwide and management area-specific standards relevant to big game

Forest Plan Reference	Standard
Forestwide p. II/17	Subject to hydrologic and other resource constraints, elk summer range will be maintained at 35 percent or greater hiding cover and areas of winter range will be maintained at 25 percent or greater thermal cover in drainages or elk herd units.
Forestwide, pp. 11/17- 18	Implement an aggressive road management program to maintain or improve big game security.
Forestwide p. II/18	Elk calving grounds and nursery areas will be closed to motorized vehicles during peak use by elk. Calving is usually in late May through mid-June and nursery areas are used in late June through July.
Forestwide p. II/18	All winter range areas will be closed to vehicles between December 1 and May 15. Exceptions (i.e., access through the winter range to facilitate land management or public use activities on other lands) may be granted.
Forestwide p. II/19	The Forest Road Management Program will be developed in conjunction with MFWP and interested groups or individuals. The Road Management Program will

<sup>&</sup>lt;sup>2</sup> Since the crafting of the Forest Plan, Montana's goals for harvestable elk have evolved to reflect increases in elk numbers from 55,000 in 1978 to 130,000 in 2005 (MFWP 2004, p. 5), public access to elk during the hunting season (Ibid. p. 25), and increases in wolves and other predators (Ibid. p. 47) among other contemporary issues – issues not necessarily in place at the time the multiple use goals and standards in the Forest Plan were developed.

Forest Plan Reference	Standard
	contain the specific seasonal and yearlong road, trail, and area restrictions and will be based on the goals and objectives of the management areas in Chapter III of the Forest Plan.
Forestwide p. II/19	Representatives from the Helena Forest and MFWP will meet annually to review the existing Travel Plan.
Forestwide p. II/19	On elk summer range the minimum size area for hiding cover will be 40 acres and the minimum size area on winter range for thermal cover will be 15 acres.
Forestwide p. II/19	Montana Cooperative Elk-Logging Study Recommendations, in Appendix C, will be followed during timber sale and road construction projects.
Forestwide p. II/19	Inventorying and mapping important big game summer/fall and winter ranges will continue.
Forestwide p. II/19	Any proposed sagebrush reduction programs will be analyzed on a case-by-case basis for the possible impact on big game winter range.
L-1, p. III/11	Specific wildlife and fisheries needs will be identified and considered when developing allotment management plans, provided the needs are compatible with area goals.
L-2, p. III/14	Wildlife habitat improvement practices, including road management, prescribed fire, and other techniques, may be used to maintain and/or enhance the quality of big game winter range. Projects will be coordinated for livestock and big game needs.
	Maintain adequate thermal and hiding cover adjacent to forage areas. Generally this means providing at least 25 percent thermal cover, where available, on identified winter range.
M-1, p. III/5	Management practices to maintain or improve wildlife habitat will be permitted where necessary to meet the objectives of adjacent management areas.
	Fish and wildlife management in the complex will be consistent with Policies and Guidelines for Fish and Wildlife Management in Wildernesses and Primitive Areas adopted by the Forest Service, Bureau of Land Management, and the International Association of Fish and Wildlife Agencies.
P-1, p. III/59	Managers will consult annually with personnel from the Montana Department of Fish, Wildlife and Parks relative to levels of harvest appropriate for maintaining native hunted and trapped species as part of the wilderness resource.
	Natural processes such as fire, wind, and insect and disease activity will be the only agents permitted to influence vegetation and its associated wildlife in the wilderness. No new exclosure structures will be installed.
R-1, p. III/24	Habitat improvement projects, such as prescribed fire and water developments, may be used to maintain or improve the fish and wildlife habitat, if the projects are compatible with the area's goals.
T-1, p. III/31	Wildlife and fisheries habitat improvement projects may be implemented, provided they are compatible with the management area goals.
T-2, p. III/	Wildlife habitat improvement practices, including road management, prescribed fire, and other techniques, may be used to maintain and/or enhance the quality of big game winter habitat.
	Maintain adequate thermal and hiding cover adjacent to forage areas. Generally this means providing at least 25 percent thermal cover, on identified winter range.
	Maintain a minimum of 35 percent hiding cover for big game.
T-3, p. III/39	Maintain thermal cover adjacent to forage areas. Appendix C provides guidance for thermal cover.

Forest Plan Reference	Standard
	Wildlife habitat improvement practices, including road management, prescribed fire, and timber harvest, may be used to maintain and/or enhance the quality of big game summer habitat.
T-4, p. III/43	Where elk habitat exists, project design will incorporate management practices to maintain or enhance summer and winter habitat to the extent that the VQOs for the area are met.
T-5, p. III/47	Wildlife and fisheries habitat improvement projects may be implemented, provided they are compatible with the management area goals.
	Maintain adequate thermal and hiding cover adjacent to forage areas, provided timber harvest volumes are not significantly reduced over the rotation period.
W-1, p. III/50	Wildlife habitat improvement practices, including road management, prescribed fire, and other techniques, will be used to maintain and/or enhance the quality of big game and nongame habitat.
vv-1, p. 111/30	Maintain adequate thermal and hiding cover adjacent to forage areas. Generally this means providing at least 25 percent cover, where available, on identified winter range.
	Most new roads and about 50% of existing roads will be closed, at least seasonally.
W-2, p. III/53	Wildlife habitat improvement practices, including road management, prescribed fire, and other techniques, will be used to maintain and/or enhance big game calving and summer habitat.
	Maintain adequate thermal and hiding cover adjacent to forage areas.

The standard that is the subject of this programmatic amendment is:

**Forestwide Standard Big Game 4(a)** [Forest Plan pp. II/17 – II/18] - Implement an aggressive road management program to maintain or improve big game security.

a. Road management will be implemented to at least maintain big game habitat capability and hunting opportunity. To provide for a first week bull elk harvest that does not exceed 40 percent of the total bull harvest, roads will be managed during the general big game hunting season to maintain open road densities with the following limits.

Table F- 3. Forest Plan big game security index

Existing Percent Hiding Cover <sup>1</sup>	Existing Percent Hiding Cover <sup>2</sup>	Max Open Road Density mi/mi <sup>2</sup>
56	80	2.4
49	70	1.9
42	60	1.2
35	50	0.1

<sup>1.</sup> Forest Service definition - a timber stand which conceals 90 percent or more of a standing elk at 200 feet

<sup>&</sup>lt;sup>2</sup>. MFWP definition - a stand of coniferous trees having a crown closure of greater than 40 percent

The existing hiding cover to open road density ratio should be determined over a large geographic area, such as a timber sale analysis area, a third order drainage, or an elk herd unit.

Big game security, according to this standard, is based on the relationship between the amount of hiding cover in an EHU and the open road density during big game rifle season. Hiding cover is defined (HFP p. II-18) as either a timber stand which conceals 90% or more of a standing elk at 200 feet, which can only be measured in the field, stand by stand; or as stands of coniferous trees having a crown closure greater than 40%, which can be determined by aerial photo interpretation and satellite imagery<sup>3</sup>. Under the Forest Plan, either method is acceptable (USDA 1986, p. II/18 and table f- 3 above). Open road densities include all motorized routes open during the big game rifle season, October 15 through December 1, and are calculated at 100% the length of all public roads and 25% the length of private roads. This relationship was based on research that indicated roads with less use have reduced impacts to elk (Perry and Overly 1976, Witmer and deCalesta 1985, and Rowland et al. 2000).

The big game security index is calculated for elk herd units (EHUs) that include all lands, public and private, within the respective elk herd unit. This means that elk security as determined by this index is partly a function of road densities and timber harvest on private lands outside management control of the Helena National Forest. Table F- 4 summarizes the current status of each EHU in the Blackfoot Non-winter Travel Plan Area relative to this index and includes reference to MFWP's population objectives which are described in further detail in the section *Correlation between Standard 4(a) and Elk Numbers*.

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 $<sup>^3</sup>$  This analysis utilizes the MFWP definition of hiding cover – i.e. stands of coniferous trees having a crown closure greater than 40%. The 40% canopy cover metric is an acceptable 'proxy' for mapping hiding cover as it is generally assumed that stands with 40% canopy cover or greater would in turn provide adequate screening cover that would hide 90% of an elk at 200 feet, the functional definition of hiding cover . This relationship of canopy cover and stand structure is based on modeling done by Lonner and Cada (1982) and others that used canopy cover to predict the relationship between hiding cover (as estimated by canopy cover), road densities, and harvest rate the first week of the general hunting season.

Table F- 4. Hiding cover, weighted open road density, and consistency with Forest Plan big game standard 4(a), by elk herd unit, by alternative

	<u>·                                      </u>						
Elk Herd Unit	Total Square Miles	Acres Hiding Cover	Percent Hiding Cover	Miles of Open Road 10/15-12/01	Open Road Density 10/15- 12/01	Meets Forest Plan Standard #4(a)	MFWP HD Population Objectives <sup>2</sup>
							500-700 elk
Arrastra Creek (HD 281)	43	11540	0.42	40.6	0.9	No	15 bulls/100 cows
							500-700 elk
Beaver Creek (HD 281)	51	17683	0.55	72.8	1.4	No	15 bulls/100 cows
							HD 293
							750 elk
							<b>HD 293</b> 10 bulls/100
							cows
							HD 339
							560-840 elk
							<b>HD 339</b> 15 bulls/100
Flesher Pass	142	39847	0.44	132.3	0.9	No	cows
(HDs 293, 339, 343, 423)	142	39041	0.44	132.3	0.9	NO	HD 343
							560-840 elk
							HD 343 10 bulls/100 cows
							<b>HD 423</b> 400 – 600 elk
							HD 423
							5 bulls/100 cows
		15768		87.1	1.3		500-700 elk

Elk Herd Unit	Total Square Miles	Acres Hiding Cover	Percent Hiding Cover	Miles of Open Road 10/15-12/01	Open Road Density 10/15- 12/01	Meets Forest Plan Standard #4(a)	MFWP HD Population Objectives <sup>2</sup>
							15 bulls/100 cows
							500-700 elk
Landers Fork (HDs 280 <sup>3</sup> , 281)	213	59695	0.44	96.2	0.5	No	15 bulls/100 cows
							750 elk
Nevada Creek (HD 293)	61	25029	0.64	57.5	0.9	Yes	10 bulls/100 cows
							750 elk
Ogden Mountain (HD 293)	88	24432	0.43	103.6	1.2	No	10 bulls/100 cows
							750 elk
Poorman Creek (HD 293)	105	42560	0.63	145.9	1.4	Yes	10 bulls/100 cows

<sup>&</sup>lt;sup>1</sup> Cover as defined by MFWP – - a stand of coniferous trees having a crown closure of greater than 40 percent

<sup>&</sup>lt;sup>2</sup> See Table F-5 Elk Management Units (EMU), Hunting Districts (HD) and Elk Herd Units (EHU) within the Blackfoot planning area for the relationship between the EHUs and MFWP hunting districts, <sup>3</sup>HD 280 has no specific MFWP objectives.

Only two of the eight EHUs (Nevada Creek and Poorman) in the Blackfoot Non-Winter Travel Plan Area meet the big game security standard threshold (Big Game standard 4(a): HFP p. II-18) under current conditions. Relative to MFWP population objectives, five EHUs fall within HDs that are below MFWP population objectives (Arrastra, Beaver Creek, Keep Cool, Landers Fork, and Poorman); two EHUs fall within HDs that are below objectives for elk numbers while above for bull/cow ratio objectives (Nevada Creek and Ogden Mountain), and one EHU (Flesher Pass) occurs within several HDs that are either at, above, or below the population numbers and bull/cow ratio objectives of the HD. Note that the two EHUs that do meet Big Game Standard 4(a) occur within HDs that are below MFWP population objectives, which suggests that the current standard may be insensitive to elk population responses to their environment and/or factors outside of Forest management are influencing elk.

Even if all open motorized routes managed by the Forest were eliminated, five of the six EHUs would still not comply with Standard 4(a). This is due to hiding cover comprising less than 50 percent in those herd units. The sixth unit, Beaver Creek, would require closure of 51 percent of its roads (approximately 37 miles) to achieve compliance.

Big game security in the planning area, as currently measured under the Forest Plan, will not improve in the foreseeable future because hiding cover would continue to decline as trees killed by the ongoing bark beetle epidemic begin to fall en masse over the next few years. Motorized route density management on the Helena National Forest cannot compensate for this loss of cover, so the standard as currently written would remain largely unmet. At the same time, elk numbers and bull/cow ratios in the planning area vary in terms of MFWP's objectives depending on the respective hunting district.

# Relationship of Forest Plan Big Game Standard 4(a) and Elk Management

#### Forest Plan Elk Population Goal

Elk numbers have been increasing across the west and in Montana since the early to mid-1900s. Statewide, post-season elk numbers increased from 8,000 in 1922 to 55,000 in 1978 and to about 160,000 in 2004 (MFWP pp. 4-5). Thus, there are no viability concerns for Rocky Mountain elk in Montana or on the Helena National Forest. This is supported by their global status of "G5' and the statewide status of 'S5' which are both defined as "common, widespread, and abundant…" However, elk remain a management indicator species on the Forest as well as an economically and socially important species, with large public interest. They continue to provide hunting, wildlife viewing, and photography opportunities, as well as fill the ecological roles associated with this native species on the landscape. Forest Plan direction related to big game is in place to ensure that sufficient habitat is available to maintain elk on public land in order to provide those consumptive and non-consumptive uses (Forest Plan, pp. II/17-18).

The big game standards found in the HNF Plan are based on state population goals outlined in *The Northern Regional Plan* (USDA 1981, pp. 4-16 and B-3). The Montana goals were derived from the *1978 Montana Statewide Comprehensive Outdoor Recreation Plan* (SCORP 1978). Big game goals and objectives embodied in the Montana plan included maintaining "an available supply of big game to meet demand for all types of big game oriented recreation while insuring the protection and perpetuation of all big game species and their ecosystems" (Ibid, p. 3). Statewide goals for elk in particular included protecting and perpetuating "elk and their habitat and to increase the supply of available, harvestable elk to meet demands for hunting and non-

hunting recreation" (*Ibid*, p. 35). The Montana Plan delineated goals and objectives by the respective 'Fish and Game Regions', the same regions in place today.

According to the *Northern Regional Plan* there were approximately 70,000 elk on the National Forests in Montana around 1981 (USDA 1981, p. 4-16 Table IV-4). State population goals projected for 1995 were intended to satisfy the growing demand for hunting and aesthetic purposes. The *Northern Regional Plan* identified desired population goals by State (*Ibid*, p. 4-17 Table IV-5) and National Forest based on those statewide goals (*Ibid*, p. B-3 Table B-3). The disaggregated total for the HNF was 6400 by year 2000.

The HNF is located within several hunting districts identified by MFWP (figure F-1). The total number of elk that have been observed in these hunting districts through the 2013 aerial surveys is 14,289 (MFWP aerial survey data). Some of these hunting districts barely overlap with the HNF. Discounting those HDs, the total number of elk that have been observed on and around the Forest is 10,727 – although this is probably an underestimate because elk that occur in the 'discounted' HDs do spend some time on the Forest. Nevertheless, the number of elk associated with the HNF is well in excess of the 6,400 population target identified in the HNF Plan (USDA 1986, p. V/5).

Montana has maintained the longest general elk-hunting season (5-weeks) of all western states; a tradition that has been in place for several decades. When the Helena National Forest Plan was crafted in 1986, Standard 4(a) was established to facilitate that longer hunting season while maintaining and/or improving big game security that would ensure that elk populations post-harvest remained aligned with MFWP objectives (USDA 1986, pp. 11/17-18 and V/5). At that time, MFWP collected data to determine the percentage of bulls harvested during the first week of the general big game hunting season, as reflected in Standard 4(a). However, MFWP no longer collects that data. Rather, MFWP now relies on bull to cow ratios measured through aerial survey trend counts. These trends are used to determine and adjust harvest regulations that allow MFWP to achieve their elk population objectives (MFWP 2004).

#### Montana Fish, Wildlife and Parks Elk Management

Montana Fish, Wildlife and Parks (MFWP) elk management during the hunting season focuses on maintaining population numbers well above viability thresholds, protecting certain sex and age classes from over-harvest, providing public hunting opportunity, and attempting to balance elk distribution across public and private lands. While these functions are a responsibility of Montana Fish, Wildlife and Parks, the Helena National Forest strives to complement their efforts by managing elk habitat on the National Forest. The Forest Service goal has been to provide habitat conditions that allow a reasonable number of elk to escape hunters so that MFWP does not have to reduce the allowable harvest or shorten the hunting season (USDA Forest Service 1986). Hunting pressure can affect both elk numbers and distribution and is partially determined by the hunting regulations (season length and structure – i.e. cow tags, either sex, brow-tined only, spikes, limited draw, etc.). The current 5-week season (longer than in most states and provinces) "permits a diversity of choice [for hunters] with regard to time, weather conditions, hunter density, and area" (Lonner and Cada 1982 cited in Hillis et al. 1991).

The State of Montana manages elk populations on an Elk Management Unit basis and establishes elk harvest regulations on a hunting district basis, which are sub-divisions of Elk Management

Units (MFWP 2004). Hunting districts are further sub-divided into EHUs<sup>4</sup>, which are the units used by the HNF to analyze security under Standard 4(a) (USDA 1986, p. II/18). Depending upon location, EHUs contain varying amounts of National Forest System land, which complicates elk security analyses for National Forest projects and limits the amount of influence that management on National Forest System lands can actually have on elk numbers and security within an individual EHU and/or larger management unit. Elk may use habitat on private land differently where hunting pressure can be much different than that found on public land.<sup>5</sup>

The Blackfoot Non-winter Travel Plan area includes four elk management units (EMU) and their respective hunting districts (HD) as defined by the state-wide Montana Elk Plan (MFWP 2004):

- Granite Butte EMU (HDs284, 293, 339 and 343);
- ♦ Bob Marshall Wilderness Complex EMU (HDs 280, 281, and 422);
- ◆ Garnet EMU (HD 298);

Birdtail Hills EMU (HD 423)

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<sup>&</sup>lt;sup>4</sup> Elk herd units are established by the Helena National Forest in collaboration with MFWP in accordance with Forest Plan Big Game Standard 2 (USDA 1986, p. II/17). While they reflect the analysis unit established in the Helena National Forest Plan by the Forest, the herd unit concept is embodied in science and referenced in the Montana Final Elk Management Plan (e.g. MFWP 2004, p. 111). MFWP elk management is based on elk management units (EMU) and those hunting districts (HD) that occur within a given EMU.

given EMU.

Sissues with displacement from public lands to private lands, or disproportionate use of private lands are widely recognized, and there are multiple contributing factors. These factors potentially include differences in access for hunting, habitat conditions, hunting regulations, and other factors such as predation (or lack thereof) and inherent habitat differences between public and private land. The importance of security areas may be reduced on private land where hunting pressure and recreational use is lower, than on public land where hunting pressure and recreational use is generally higher. Private land is not the desired way to provide security for elk that also use public lands, as that situation results in lost opportunity for the general public and decreased or lost management effectiveness relative to population control. In addition, when elk are displaced to private land, it negates any intentional elk—related management decisions by the Forest. Although it isn't desirable for posted private land to act as security for elk using public lands, elk may choose that form of security.

Table F- 5 and figure f- 1 illustrate the nested relationship between these management and analysis units, and the varying amount of National Forest System lands within them.

Table F- 5. Elk Management Units (EMU), Hunting Districts and Elk Herd Units (EHU) within Blackfoot planning area

EMU	Hunting Districts Containing NFS Land within the Planning Area	Associated EHUs
Birdtail Hills	423	Flesher Pass
	280	Landers Fork
Bob Marshall Wilderness Complex	281	Arrastra Creek, Beaver Creek, Keep Cool, Landers Fork
	422	Landers Fork
Garnett	298	Ogden Mountain
	284	N/A - All Private Land
Granite Butte	293	Ogden Mountain, Nevada Creek <sup>1</sup> , Poorman Creek <sup>1</sup> , Flesher Pass
	339	Flesher Pass
	343	Flesher Pass

<sup>1</sup> Elk Herd Units currently meeting Big Game Standard 4(a) (2)

#### Factors Influencing Elk Management

Each Elk Management Unit (EMU), and associated Hunting District(s), has its unique challenges that relate to management of elk. Although varied by Hunting District, overall challenges include the impacts of predation on elk populations, the amount of public land in the Unit, the level of restricted hunting access on private land, and extent of motorized use. Refer to the Montana Elk Plan (MFWP 2004) for more information. There are also inherent differences in habitat amongst EMUs.

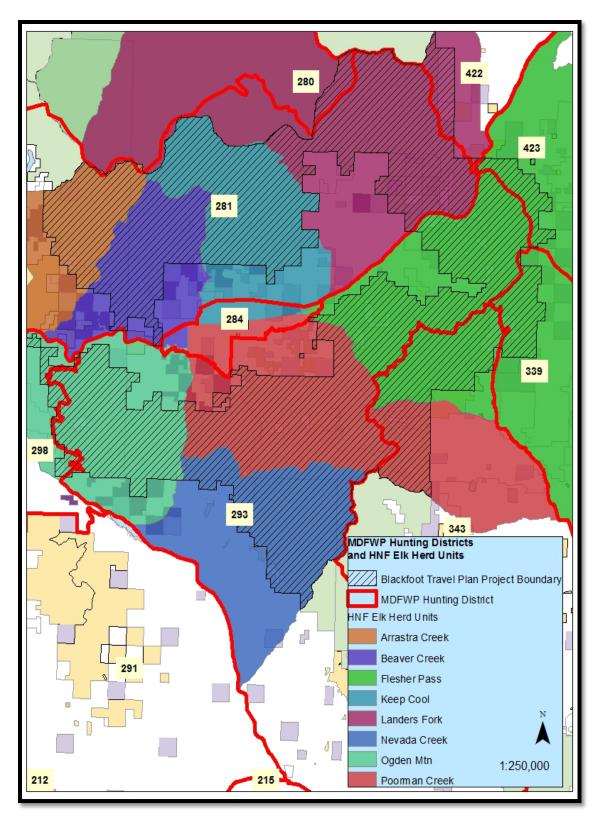


Figure F- 1. MFWP hunting districts and HNF herd units

Table F- 6 provides information relative to MFWP population objectives in a majority of the Hunting Districts (HD) overlapping the Blackfoot travel planning area. There are nine hunting districts that overlap with the planning area although HDs 298, 422 and 423 only contain minor amounts of National Forest System lands within the planning area. HD 284 is entirely off of the Forest and is not included in the table.

Table F- 6. MFWP population objectives and recent trend data in hunting districts that overlap with the Helena National Forest

Hunti	ing District <sup>1</sup>	Population Objectives Based on Aerial Surveys Post-Harvest (MFWP 2004)	Recent Trend Data (Year of Data)	Summary
280		No specific objective; tied to 281	No specific data	Harvest objectives are based on elk numbers in adjacent hunting districts. See discussion below (HD 281) for management challenges in this HD.
281	Number of Elk	500-700 elk	452 elk (2013)	Elk numbers and bull/cow ratio below objectives. Management challenges in this HD include access, disposition of Plum Creek Timber lands, predation, and habitat conditions related to forage availability (MFWP 2004, pp. 113-115) "Many segments of the elk populations are influenced"
	Bull/ Cow Ratios	15 bulls/100 cows or 8% bulls/total elk observed	7 bulls/100 cows (2013)	by the successional stages of vegetation in the wilderness and by roadless habitats. Much of this area is not at a successional stage of vegetation that is conducive to producing abundant forage and dense elk populations."
293	Number of Elk Bull/ Cow	750 elk 10 bulls/100 cows	609 elk (2013) 13 bulls/100 cows	Elk numbers below objectives, bull to cow ratio above objectives.  Management challenges in this HD include development, access, noxious weeds, predation, and elk security in terms of cover and
	Ratios	TO buils/ Too cows	(2013)	road densities (MFWP 2004, pp. 197-198).
298*	Number of Elk	600 elk	1087 elk (2013)	Elk numbers above objectives. Management challenges in HD 292 include private property restricted access during the hunting season and OHV illegal use, residential development, and future disposition of Plum Creek Timber land (MFWP 2004, pp. 147-148). Management challenges in HD 293 include development, access, noxious weeds, predation, and elk security in terms of cover and road densities (MFWP 2004, pp. 197-198).

Hunti	ing District <sup>1</sup>	Population Objectives Based on Aerial Surveys Post-Harvest (MFWP 2004)	Recent Trend Data (Year of Data)	Summary
339	Number of Elk	560-840 elk	785 elk (2013)	Elk numbers meets objectives; bull/cow ratio above objectives. Management challenges in this HD include housing development,
339	Bull/ Cow Ratios	15 bulls/100 cows	27 bulls/100 cows (2012 as reported in 2013)	access, noxious weeds, predation, and elk security in terms of cover and road densities (MFWP 2004, pp. 197-198).
	Number of Elk	560-840 elk	656 elk (2013)	Elk numbers and bull/cow ratio meets objective. Management challenges in this HD include housing development, limited
343	Bull/ Cow Ratios	10 bulls/100 cows	10 bulls/100 cows (2013 as reported in 2013)	access due to private land closed to hunting, noxious weeds, predation, and elk security in terms of cover and road densities (MFWP 2004, pp. 197-198).
400	Number of Elk	450- 550 elk	1687 elk (2012)	Elk numbers and bull/cow ratio above objectives. Management challenges in HD 422 include
422	Bull/ Cow Ratios	5 bulls/100 cows	26 bulls/100 cows (2012)	extremely limited hunter access to private property (MFWP 2004, p. 114).
	Number of Elk	400 – 600 elk (for the entire Elk Management Unit)	419 elk (2013)	Elk numbers at objective.  Management challenges in this HD include lack of hunter access associated with private properties
423	Bull/ Cow Ratios	5 bulls/100 cows	No cows observed during aerial survey (2013)	either outfitted or closed to hunting have resulted in reduced levels of antlerless harvest (MFWP 2004, p. 327)

<sup>\*</sup>HD 298 was originally included in portions of HDs 292 and 293 and became its own HD after the release of the Montana Final Elk Management Plan January 2005. The elk objectives are therefore articulated in annual aerial survey data.

#### Correlation between Standard 4(a) and Elk Numbers

The Forest Plan established goals, objectives, and standards designed to achieve a desired future condition for elk habitat as articulated in the Forest Plan (USDA 1986, pp. II/11-14). Standard 4(a) (Ibid. p. II/17-18) was crafted to move the Forest towards providing habitat potential to support a target elk population of 6,400 by the year 2000 (Ibid. p. V/5). Based on aerial survey data collected by MFWP, there are at least 10,727 elk that have been observed on and around the Forest, in excess of the 6,400 population target identified in the Forest Plan. The Forest has realized its population goal without consistently meeting Standard 4(a) which suggests that this standard has not proven as useful as intended.

As illustrated above in table f- 4 and

table f- 5, there is not a strong correlation between achievement of Forestwide Standard Big Game 4(a) within a particular EHU and the actual performance of the elk population within the relative Hunting District. For example, the Flesher Pass EHU, which does not meet Standard 4(a), is located within HDs 281, 339, and 343. HD 281 is currently below population objectives while HDs 339 and 343 meet their elk population objectives. Furthermore, management challenges as described in the Montana Final Elk Management Plan associated with HD 281 include lack of forage (not cover) while those associated with HDs 339 and 343 do include a cover consideration. In other words, while cover is a concern in HDs 339 and 343 and the lack of cover in the Flesher Pass EHU partially explains its inconsistency with Standard 4(a), those HDs meet population objectives. Conversely, HD 281 does not meet population objectives and lack of cover is not a management challenge in this HD. Another example includes the Nevada and Poorman EHUs which currently do meet Standard 4(a); however, they are partially and/or totally located within HD 293 which is below objectives in terms of elk numbers and above objectives in terms of the bull/cow ration. A management challenge in this HD is cover. Compliance, or lack thereof, with standard 4(a) is not a good indicator of elk population performance given the patterns of land ownership and other factors affecting elk security and/or population levels.

Additionally some population metrics such as overall elk population levels may be as determined outside of the hunting season as by what happens during the hunting season. For example, body fat condition, pregnancy rates and recruitment into the population may be determined outside of the hunting season, but have dramatic effects on populations.

#### Recent Science Regarding Elk Management

The Forest Plan direction found in the original Helena National Forest Plan is 27 years old and does not reflect the subsequent 27 years of relevant science and data, changing issues with regards to elk, or changing elk numbers and distribution. The original Helena Forest Plan standard for measuring elk vulnerability in the hunting season uses an index that combined open road density and hiding cover (table f- 3). While this relationship can be informative, it does not account for the spatial arrangement and size of unroaded patches, topography as a mediator of hunter access, the distribution of forage, and other factors that influence the ability of elk to survive the hunting season. Research since the crafting of the Helena Forest Plan emphasizes, among other factors, the effects of open motorized routes on elk security. For example, forest stands that do not meet the definition of hiding cover may prove to be secure areas for elk where local conditions of topography, remoteness, and environmental barriers impede hunter access. Conversely, blocks of hiding cover situated in areas with high levels of motorized use may be highly insecure. Hiding cover has a role to play but it is not synonymous with security (Lyon and Canfield 1991; Unsworth and Kuck 1991; Lyon and Christensen 1992; Christensen et al. 1993, Stubblefield et al. 2006 p. 1068, Montgomery et al. 2013, p. 322, Proffitt et al. 2013)).

In summary, the big game security index, as currently formulated, will be impossible to meet throughout most of—and possibly all of—the Blackfoot landscape for the foreseeable future (25-50 years), not because of deficiencies in travel management, but because of the natural loss of hiding cover. The current standard also has an objective based on elk management metrics (percent of bull harvest occurring during the first week of the general big game hunting season) that are no longer being collected by MFWP. Additionally, despite the ongoing loss of cover, elk numbers continue to exceed the Forest Plan benchmark of 6,400 elk by the year 2000, indicating that the link between cover on National Forest System lands and elk security, as reflected by stable or increasing elk populations and/or bull to cow ratios, is not as strong as envisioned when the Forest Plan was developed. As a result, attempts to implement the current standard are placing

impractical constraints on Forest management and on the ability of the public to use the Forest, and may not be having the effect on elk as it was understood 28 years ago.

#### The Concept of Elk Security Areas

Big Game Standard 4(a) addresses big game security. It was developed in response to concerns about both big game habitat capabilities as well as hunting opportunities and to address one key factor in overall elk vulnerability during the hunting season – the proportion of bull elk harvest occurring during the first week of the (general) hunting season (USDA 1986 at II-17). Elk vulnerability during the hunting season is defined as "a measure of elk susceptibility to being killed during the hunting season" and is generally considered to be the opposite of security (Lyon and Christensen 1992, Stalling et al. 2002). It is a concept that is the sum of many factors including security, hunter opportunity, and elk behavior. Security is defined as "the protection inherent in any situation that allows elk to remain in a defined area despite an increase in stress or disturbance associated with the hunting season or other human activity" (Lyon and Christensen 1992, Stalling et al. 2002). Security is the result of a combination of factors that allow elk to remain in a specific area while under stress from hunting (Christensen et al. 1993). The components of security may include vegetation, topography, road density, size of vegetation blocks, and hunter density, among others (Lyon and Christensen 1992).

Lonner (1991) outlined three key aspects of elk vulnerability during the hunting season:

- Maintaining good habitat security that would protect elk from becoming easy prey during the hunting season;
- Preserving or recovering desired elk population characteristics and distributions in the face of intensifying land management practices; and
- Satisfying the growing demand for quality elk hunting and non-hunting experiences.

Thomas (1991) provided even more detail, stating that elk vulnerability during the hunting season, particularly of bull elk, during the hunting season, is consistently related to the following factors:

- Increasing densities of roads open to traffic hunter access and numbers;
- Increasing numbers and densities of hunters;
- Decreasing amounts of cover;
- Fragmentation of cover into smaller patches;
- ♦ No restrictions on bull harvest i.e., all antlered animals are legal game;
- Setting of open seasons that include the rutting period;
- Improving "technology" of hunting including weapons, vehicles, calls, and training tools; and
- Longer hunting season;
- Relatively gentle terrain;
- Increasing number of hunter days.

Although the terms elk security and elk vulnerability during the hunting season are strongly related and are often used interchangeably, it is important to remember that they are actually

inversely related – as security declines elk vulnerability during the hunting season increases (Stalling et al. 2002 – citing Youmans 1992).

In the Blackfoot landscape (as on much of the HNF), elk security during the hunting season is an important determinant of elk abundance and population structure. While the ability of elk to survive the hunting season is influenced by a number of environmental circumstances, the status of the local Forest transportation system – and subsequent hunter access - is often the key factor (Proffitt et al. 2009). Several studies have documented the effect of roads on elk security, population structure, and hunter success (Edge and Marcum 1991; Leptich and Zager 1991; Unsworth and Kuck 1991; Gratson and Whitman 2000, Gucinski et al. 2001, Grigg 2007). While most studies demonstrate that open roads influence elk distribution during the hunting season and that road closures can lower the kill rate in a given area, at least one study indicates that in certain circumstances road closures do not alter hunter success (Burbridge and Neff 1976 cited in Gratson and Whitman 2000). In some cases, displacement of elk from roaded public land into more remote terrain (or to inaccessible private land) early in the hunting season can serve to depress the kill rate throughout the remainder of the season. Obviously hunting season and structure can have a direct effect on hunting pressure and the resulting situation for elk in addition to habitat management.

Since the release of the Helena Forest Plan in 1986, field research in Montana and Idaho has led to the concept of "elk security areas" as a basis for assessing elk vulnerability during the hunting season. The degree to which elk are able to survive the fall hunt is seen, in large part, to be a function of the size and pattern of habitat blocks, amply forested in most cases, to which hunter access is limited. Hillis and others (1991) developed an analysis procedure (generally referred to as the "Hillis method") based on the availability of large non-linear blocks of habitat (equal to or greater than 250 acres) at least 0.50 mile from open roads. Hillis and others recommended that at least 30 percent of the "hunting season home range" within a "standardized habitat analysis unit" be held in security areas (Hillis et al., p. 39). Hillis cautioned, however, that this set of parameters was designed for densely-forested western Montana elk habitat, and—particularly for areas further eastward where forest cover may be limited—security requirements should be evaluated on a site-specific basis and guidelines adjusted so results make biological sense in a local setting (Hillis et al. 1991, p. 40; Christensen et al. 1993, p. 5). The underpinnings of this methodologyi.e., elk tend to avoid open, motorized routes during the hunting season—has been reinforced through the work of Unsworth and others (1991, 1993), Rowland and others (2000, 2005), and Proffitt and others (2011), to name just a few.

It's important to keep in mind that the Forest Plan Big Game Security standard (4(a)) was designed to address MFWP elk objectives in place at the time of Forest Plan development and to support existing hunting regulations. These objectives were tallied up to a Forestwide level with the intent to provide habitat sufficient for 6,400 elk. The standard addressed the need for distribution of elk across the landscape by setting the standard at the herd unit level; however, the objectives were intended to be realized Forestwide. Also noteworthy is the fact that many of the Hunting Districts that overlap with the Helena National Forest are at or above population objectives set forth in the MFWP 2004 Elk Management Plan (See

table f- 5 and MFWP aerial survey data in the project file).

#### **Alternatives Considered in Detail**

#### Alternative A – No Action

Alternative A - No Action would retain the existing Big Game Security Forest Plan Standard. In this case, 'no action' means that we would not amend the Forest Plan and the existing Forestwide Standard 4(a) for Big Game Security would not be changed. The exact language of the current standard is as follows and this would remain as written under forest plan amendment alternative A:

**Forestwide Standard Big Game 4(a)** (HFP pp. II/17 – II/18) – Implement an aggressive road management program to maintain or improve big game security.

**b.** Road management will be implemented to at least maintain big game habitat capability and hunting opportunity. To provide for a first week bull elk harvest that does not exceed 40 percent of the total bull harvest, roads will be managed during the general big game hunting season to maintain open road densities with the following limits.

Table F- 7. Forest Plan big game security index

F	Forest Plan Big Game Security Index				
Existing Percent Hiding Cover <sup>(1)</sup>	Existing Percent Hiding Cover <sup>(2)</sup>	Max Open Road Density mi/mi²			
56	80	2.4			
49	70	1.9			
42	60	1.2			
35	50	0.1			

<sup>(1)</sup> Forest Service definition - a timber stand which conceals 90 percent or more of a standing elk at 200 feet.

The existing hiding cover to open road density ratio should be determined over a large geographic area, such as a timber sale analysis area, a third order drainage, or an elk herd unit.

We have included a detailed analysis of this alternative in response to public comments that suggested retaining the existing standard and provide for a cover requirement in managing elk security.

The effects of implementing Forest Plan amendment alternative A (keeping the current Forest Plan standard) are described in the following alternative comparison section. This alternative was also evaluated for its effect to other resources, as described in FEIS chapter 3.

#### Alternative B - Preferred Alternative

Alternative B was designed to address size of security blocks, effects of archery season on elk security, best science and local knowledge, and issues identified during the scoping and comment periods. It also expands consideration to all open motorized routes (whereas alternative A only applies to roads). Alternative B would replace the existing Forest Plan Big Game Standard 4(a). The exact language of the proposed Forest Plan goal and standard are as follows:

<sup>(2)</sup> MFWP definition - a stand of coniferous trees having a crown closure of greater than 40 percent.

#### Standard

Road management will be implemented to maintain or improve big game security<sup>6</sup> and hunting opportunity.

This standard applies only to the National Forest System lands within those portions of an elk herd unit that are within the Lincoln Ranger District, Helena National Forest administrative boundary.

**Public Motorized Use:** Public motorized use will be managed during the hunting season (from 9/1 - 12/1) to maintain elk security at the following levels:

Percentage of Elk Security within that Portion of an Elk Herd Unit within the Lincoln Ranger District
Administrative Boundary by Travel Plan Alternative

Herd Unit	Alternative 1 Security %	Alternative 2 Security %	Alternative 3 Security %	Alternative 4 Security %
Arrastra	57	55	57	57
Beaver Creek	41	47	52	48
Flesher Pass	27	32	49	42
Keep Cool	36	46	60	52
Landers	84	84	84	84
Nevada	44	47	59	52
Ogden	21	23	41	24
Poorman	12	15	40	32

**Other Use:** Administrative use<sup>7</sup> for travel on routes that are closed to public motorized use is permitted subject to existing authorization procedures (i.e. variances approved by line officers are required prior to use of motorized routes closed to the public).

Temporary reductions associated with management activities in security blocks between 9/1 and 12/1 are allowed as long as impacts to elk or elk security are mitigated<sup>8</sup> at the project level. Temporary reductions will be evaluated and effects analyzed (including cumulative effects) at the project level and reviewed by a journey level wildlife biologist. It is at this scale and time when

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<sup>&</sup>lt;sup>6</sup> Security is defined as a proportion of an elk herd unit within the administrative boundary of the Lincoln Ranger District that consists of an area of at least 1000 acres in size that is at least ½ mile from a motorized route open to the public between 9/1 and 12/1. Security blocks do not include constrictions less than or equal to ½ mile in width. Security is calculated across all ownerships within the administrative boundary. <sup>7</sup>Administrative use for travel on motorized routes is defined as vehicle use associated with management activities or projects on land administered by the Forest Service or under authorization of the Forest Service. Management activities include but are not limited to, law enforcement, timber harvest, reforestation, cultural treatments, prescribed fire, watershed restoration, wildlife and fish habitat improvement, private land access, allotment management activities, and mineral exploration and development that occur on land administered by the Forest Service or under authorization of the Forest Service.

<sup>&</sup>lt;sup>8</sup>Mitigation is defined as design elements and/or constraints applied to project level activities that reduce project impacts on elk or elk security. Mitigation measures may include but are not limited to one or more of the following: timing restrictions of activities in security blocks, confining activities to one security block at a time, completing as much of the preparatory work as possible prior to the hunting season, reducing the size/acres/intensity/magnitude of the activity, allowing activities that benefit elk (particularly in management areas with a wildlife emphasis), limiting activities to one season, and temporarily closing roads open to the public to compensate for the activity.

project design features and/or mitigations would be applied to ensure that impacts to elk or elk security during hunting season are addressed and reduced over the implementation timeline of the project. Temporary reductions are managed at the project scale and at the herd unit (or across herd units where security blocks cross into one or more herd units) to ensure big game security during the 9/1 - 12/1 hunting season is maintained or improved over the long term.

#### Exceptions to the Standard

Emergency situations are not subject to this standard.

#### Goal

Maintain or, where opportunities arise, improve big game security in those portions of an elk herd unit within the administrative boundary of the Lincoln Ranger District during the 9/1 - 12/1 hunting season where security is less than 50 percent. Maintain big game security in those portions of an elk herd unit within the administrative boundary of the Lincoln Ranger District between 9/1 and 12/1 where security is greater than or equal to 50 percent.

#### Discussion

The existing Forest Plan Big Game Standard 4(a) (alternative A)was originally crafted as part of the Forest Plan to provide big game security during the hunting season and largely reflected work by Lyon and others (1985) that was based on a focused road building and timber management program on National Forests in Montana. While this provision remains relevant—i.e. maintaining big game security during the hunting season—the method by which big game security is measured needs to be updated to reflect more recent scientific deliberations and to address shortfalls in the application of the current standard, primarily the fact that the current standard is not a particularly sensitive indicator of changing elk security conditions (See the *Purpose and Need and Background/Overview sections* above and the effects discussion of the amendment in the FEIS). To that end, alternative B was developed through discussions with MFWP, input from public comments, and the *U.S. Forest Service and Montana Department of Fish, Wildlife, and Parks Collaborative Overview and Recommendations for Elk Habitat Management on the Custer, Gallatin, Helena, and Lewis and Clark National Forests* (MFWP and USDA Forest Service 2013).

Alternative B is based on the concept of identifiable, security areas. Security areas are intended to reduce elk vulnerability during the elk hunting season, and to provide animals the opportunity to meet their biological needs without making large range movements (e.g. to private land where hunting is not allowed or to lower quality habitats) (Lyon and Canfield 1991). This also allows for a more ethical, fair chase hunting experience, and for the hunting public to have the ability and real opportunity to effectively hunt and harvest a public resource on public lands.

The concept of security areas is embodied by the "Hillis paradigm", a paper compiled by Hillis et al. in 1991 as part of an elk vulnerability symposium. The basic tenets of security areas under the "Hillis paradigm" include areas at least ½ mile from an open motorized route and at least 250 acres in size. The authors cautioned that in some cases, distance from open routes and the size of security area blocks may need to be increased depending on local conditions. They also recommended that at least 30 percent of an analysis unit be comprised of security areas.

Although Hillis et al. (1991) define security as "non-linear blocks of hiding cover", they also suggest that effective security areas may consist of several different cover –types if the block is relatively un-fragmented. The studies considered by Hillis et al. were conducted in areas of contiguous forest cover. In their discussion of security areas, Christensen et al. (1993, pp. 4, 5) speak to the significance of cover in this equation and note that where cover is ubiquitous, security can be controlled by road management alone. They recommend that in the more naturally open elk habitat in central Montana cover considerations should extend beyond the hunting season and therefore be assessed at a landscape level (See also Edge et al. 1987). Their data suggest that "elk are less selective about the specific vegetative characteristics of coniferous

cover and more responsive to the size of units, connectiveness with adjacent units, and the scale of cover on the landscape" (Lyon and Canfield as cited in Christensen et al. 1993, p. 5).

In contrast to the Hillis et al. study areas, the landscape on the Lincoln Ranger District tends to include open habitat and areas where forests and grasslands are interspersed in a mosaic pattern. As such, consideration of the quantity and quality of forested cover across the entire EHU would be better than defining security areas as "blocks of hiding cover". This would allow for recognition of those situations where a mosaic of forest and/or open habitats exists, but which operationally are secure. In addition, recent analyses of elk habitat selection during the hunting season in Montana (Proffitt et al. 2013) did not show a significant selection for security areas comprised totally of coniferous cover. In addition, the analysis by Proffitt and others showed that security areas as a variable in habitat selection during the hunting season are strongly related to the motorized route variable.

Avoidance of roads is presumed to be a behavioral response conditioned by vehicular traffic. Other factors, including better hiding cover and lower road standards, can be expected partially to mitigate the negative response by elk. However, the best method for attaining full use of habitat appears to be effective road closures (Lyon 1983, p. 4).

McCorquodale (2013), in his review of the scientific literature on elk and roads, concluded that recent data demonstrated empirically that elk distribution and habitat use are strongly influenced by road effects; high road densities and traffic levels predictably reduce elk use.

Hillis et al. only speak to "open roads" and "closed roads". They suggest that hunting pressure is concentrated along open roads, but that closed roads located within security areas may increase elk vulnerability by providing walking and shooting lanes. Unsworth and Kuck (1991) note that road closures may have varied effects on animal distribution and hunter use and success. They cite to several studies where road closures allowed elk to remain in more preferred sites for longer periods of time (Irwin and Peek 1979). Basile and Lonner (1979) reported that when vehicular travel was restricted, hunters spent more time walking, saw more elk, and had greater success and reported having a higher quality hunting experience. Based on these studies and the recent review from McCorquodale (2013) on elk and roads, the Hillis et al. recommendation to "minimize" closed roads within security areas was deemed unnecessary.

Hillis et al. (1991) also recommend identifying security areas within the hunting season home range. In practice on the Lincoln Ranger District, elk have the potential, depending on weather and other conditions, to use the entire breadth of elevations within their home range during the big game archery and general rifle hunting seasons. Therefore, it is not necessary or possible to identify a consistently "separate" fall use area within an EHU.

Despite these specific recommendations, Hillis et al. emphasize that "strict adherence to the guidelines should be avoided" (Hillis et al. 1991). As part of public input, we received a letter from M. Hillis and J. Lyon relative to the application of the "Hillis Paradigm" in this project. That letter suggested that "...applying the paradigm to eastside forests with typical open forest cover types...would be imprudent without first doing some formal review with local biologists and researchers familiar with the unique harvest situations on the eastside." To that end, the parameters in alternative B were developed with MFWP and reflect the broader collaborations outlined in MFWP and USDA Forest Service (2013) to which Jack Lyon contributed.

The Hillis Paradigm was tested on the Bighorn National Forest which has landscape conditions similar to the eastside of the HNF but not necessarily the Lincoln Ranger District, which resides

west of the Continental Divide under more favorable growing conditions. The Rocky Mountain Elk Foundation and Wyoming Game and Fish Department (described in Jellison 1998 and Wyoming Game and Fish Department 2004) attempted to modify the security parameters identified in Hillis et al. to include larger forested patches and greater distances from open roads. They found that few areas met the 30 percent security levels identified in Hillis et al., most likely due to the open nature of the landscape. They concluded that the 30 percent recommended threshold may not be applicable to some landscapes and that other factors need to be considered in determining if an area is secure (Jellison 1998, p. 5).

In the *U.S. Forest Service and Montana Fish, Wildlife and Parks Collaborative Overview and Recommendations for Elk Habitat Management on the Custer, Gallatin, Helena, and Lewis and Clark National Forests* MFWP biologists advocated for a 'hunting season' that included the archery season as well as the general rifle season when analyzing elk security. They cited a consistent increase in the number of archery hunters (doubling between 1990 and present) (see also Proffitt et al 2013 and Griggs 2007) and subsequent increased levels of motorized use during the archery season. As a result of this effort and further travel plan related discussions with MFWP, alternative B was developed to try to reduce or eliminate elk displacement from public land prior to normal migration events. The objective of maintaining or enhancing elk presence on NFS lands so that elk are available to the hunting public on public land was considered in the determination of the specific parameters (block size, distance from motorized routes) used to identify security areas, in the percentage of the EHU dedicated to security areas, and in discussions involving hunting season related seasonal road closures.

Alternative B would confine the security analysis to that portion of the EHU that occurs within the HNF administrative boundary and includes private land within that confine. MFWP, in their comment letter, supported this approach. "For an amended Lincoln Ranger District Big Game Security standard to both meet management objectives and allow consistent project-level analyses, it should only consider security areas within the national Forest boundary over which it has authorized travel management authority" (Letter on file in project record). However, for the purposes of analyses and cumulative effects of activities, the herd unit will continue to serve as the basis for those analyses.

Private land inholdings within the Lincoln Ranger District administrative boundary are factored into the security analysis according to the type of motorized access to those parcels. Private motorized routes are considered open for the purposes of the security analysis and are buffered by ½ mile. Private lands outside of the half mile buffer contribute to security if they are part of a 1000 acre area or greater. Inholdings without roaded access count towards elk security if the minimize size criteria of 1000 acres is met.

Concern was expressed that private land inholdings and associated road access could weaken elk security. Figure F- 6 through figure f- 9 however, demonstrate that the amount of private land, and associated roads, within elk security areas is insignificant and should not compromise the ability of those areas to provide elk security.

The size of the security areas reflects the recommendations developed collaboratively with MFWP on this amendment; in order to adequately protect bull elk, reduce displacement to private land refuges during the hunting season, and obviate the need for a vegetation cover requirement, only those areas greater than or equal to 1,000 acres and more than ½ mile from an open motorized route were considered secure. Although cover is not required as part of a security area definition, standards remain in place that will ensure hiding cover is provided during future management activities.

Temporary reductions in elk security are permitted in alternative B. These reductions may be the result of allowing administrative use of motorized routes closed to the public from 9/1 through 12/1 and/or by allowing management activities within a respective security area. Figure F- 2 through figure f- 5 identifies those motorized routes that have the potential to be used administratively. As indicated on those figures the potential for this use is limited to a few security blocks.

Alternative B also provides for emergency situations such as fire suppression activities, search and rescue, among others. These emergency situations are not bound by this standard since they are time sensitive and potentially life-threatening.

Concern was also expressed that alternative B does not impose maximum open motorized route densities contrary to the existing standard. However, because alternative B would 'fix' security percentages, which are in large part the result of open route densities, then in essence Alternative B also imposes maximum open route densities.

Concern was expressed by the public that decoupling the hiding cover requirement from big game security could impact other species that may be declining in Montana (Newell and Kujala 2013). However, several Forest Plan standards remain in place that govern cover management (See Table F- 2) and provide for other species (e.g. mule deer)<sup>9</sup>. Future project level NEPA analyses will need to assess consistency with these Forest Plan standards.

Alternative B also includes a goal of maintaining or improving big game security during the hunting season. For those portions of an elk herd unit within the Lincoln Ranger District administrative boundary where elk security is less than 50 percent the goal provides for maintaining that percentage or improving the elk security. Where security is greater than or equal to 50 percent, the goal provides for maintenance of that percentage. The 50 percent threshold is based on collaboration with MFWP as part of the amendment development.

#### Alternatives Not Carried Forward or Considered in Detail

Federal agencies are required by the Council on Environmental Quality to rigorously explore and objectively evaluate reasonable alternatives and to briefly discuss the reasons for eliminating any alternatives that were not developed in detail (40 CFR 1502.14a)

Public comments received during the scoping and comment period provided suggestions for additional alternatives for the Forest Plan amendment. These alternatives were considered but dismissed from detailed study for the reasons summarized below.

### The Proposal as Released to the Public in the DEIS

Through collaboration with MFWP and review of public comments, several components of the original amendment as described in the DEIS needed to be adjusted to reflect local conditions on the Lincoln Ranger District. Most notably were the use of the 30 percent threshold and the 250 acre security block size. Through collaboration, alternative B was developed to include the recommendation to increase the security block size to 1,000 acres and increase the desired minimum threshold to 50 percent even though it was realized that some units might never meet this desired level.

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<sup>&</sup>lt;sup>9</sup> For example Big Game Standards 8-10 (USDA 1986, p. II/19)

# A Modification of our Existing Forest Plan Standard 4(a) to Clarify the Unit of Analysis as only including National Forest System lands

Adjusting the standard to just reflect conditions on National Forest System lands would eliminate the current burden of trying to compensate for changing conditions on private lands. However, the existing standard still requires the use of a cover percentage to calculate the security index. It has been shown that compliance, or non-compliance, with this requirement is not really reflective of conditions affecting elk security and population levels and can be greatly affected by natural events beyond Forest Service management control. Changing the standard to only address NFS lands would not alter this and therefore not improve upon the present situation.

#### Alternative B with the dates of 10/15 - 12/1

Through collaboration with MFWP and review of public comments it was recognized that vehicle traffic associated with the archery season displaced elk and compromised elk security. MFWP cited a consistent increase in the number of archery hunters (doubling between 1990 and present) and subsequent increased levels of motorized use during the archery season. This is supported by recent studies that documented the effects of archery season on elk movement (Conner et al. 2001, Vieira et al. 2003) and on elk pregnancy rates (Davidson et al. 2012). Incorporating only the rifle season into alternative B would not provide the desired elk security. As a result, this alternative was not carried forward into the FEIS.

# An Alternative with Specifications Outlined in Alternative B with EHU Specific Security Percentages

This alternative would adopt the specifications detailed in alternative B but rather than using 50 percent security as a benchmark, threshold percentages would be alternative and herd unit specific. This was dismissed because opportunities for improvement in elk security would not be evident.

## Findings Required by Law, Regulation and Policy

#### National Environmental Policy Act

The direct, indirect and cumulative effects of applying this amendment were analyzed by resource and this is documented in chapter 3 and the project record.

### National Forest Management Act

The National Forest Management Act (NFMA) provides that forest plans may be amended in any manner, but if the management direction results in a significant change in the plan, additional procedures must be followed.

In April 2012, the Forest Service adopted new planning regulations at 36 CFR 219, Subpart A and Subpart B, which replaced the final 2000 land management planning rule (2000 rule) as reinstated in the Code of Federal Regulations on December 18, 2009 (74 FR 67062). The 2012 rule includes a transition period during which plan amendments may be initiated under the provisions of the prior planning regulation for 3 years after May 9, 2012 and may be completed and approved under those provisions. This amendment is being completed under the provisions of the prior regulations. It is, however, subject to the objection process in 36 CFR 219 Subpart B (at 219.59(b)).

The 1982 regulations at 219.10(f) require the agency to determine whether or not a proposed amendment would result in a significant change in the plan. If the change resulting from the

proposed amendment is determined to be significant, the same procedure as that required for development and approval of a plan shall be followed. If the change resulting from the amendment is determined not to be significant for the purposes of the planning process, then the agency may implement the amendment following appropriate public notification and completion of the NEPA procedures.

These factors were considered and will be fully documented and discussed in the Record of Decision.

Consideration of impacts of this amendment on other laws and regulations is described at the end of FEIS chapter 3 and will also be fully documented and discussed in the Record of Decision.

## **Summary and Conclusions**

One of the objectives of the Blackfoot Travel Plan is to avoid imposing dated management direction contained in the Helena Forest Plan (USDA 1986) on the road and trail system of the Blackfoot landscape. The argument for doing so with regard to big game security standards has been made in previous sections. This section condenses the rationale into a more compact format.

The Travel Plan is designed to maintain a road and trail system that provides the public with reasonable access to the national forest and allows the Forest Service to manage the landscape with some efficiency, while at the same time, buffering as much of the wildlife resource as possible from problems generated by motor vehicles and disruptive human presence in general. Part of the process of balancing the need for road access with the security requirements of big game animals entails developing a system of habitat assessment and management guidance that can accurately depict the security status of elk in a given area and appropriately address any problems detected. Experience with the Forest Plan over the last couple decades has led HNF wildlife biologists to conclude that elk security standards in the Plan—particularly big game standard 4(a) (HFP, pp. II/17 – II/18)—do not accurately reflect the habitat needs of elk during the hunting season and have required road closures that restrict travel but often do not improve elk security.

#### In particular:

- Forest Plan standard #4(a) (the big game security index would conclude that six of the eight elk herd units in the Blackfoot landscape are deficient in elk security to the point that they do not meet the standard.
- Despite the situation that six out of eight EHUs do not meet Forest Plan Standard 4(a), elk numbers have been steadily increasing since the crafting of the Forest Plan in 1986. Aerial survey data collected by Montana Fish, Wildlife, and Parks staff through 2013 indicate that there are at least 10,727 elk within the hunting districts that overlap with the Helena National Forest. This is well above the 6,400 benchmark identified in the Forest Plan.
- Montana Fish, Wildlife, and Parks data indicate that elk populations in the Blackfoot landscape are either at or near population objectives of the Montana Elk Plan (2004) for the last several years for most of the HDs; or that management challenges are only partially habitat related. That is, elk security is adequate in many HDs. The current Forest Plan standard is not an accurate indicator of elk security.
- In spite of the fact that the travel plan alternatives propose to close several miles of roads to vehicle access during the hunting season, big game standard 4(a) indicates that there is no improvement in elk security in any unit.

- In several herd units, not even the closure of all roads managed by the Forest would be enough to meet standard 4(a). In another herd unit approximately 36 miles of roads would need to be closed if the standard is to be met. These requirements are impractical on a grand scale, and the HNF is put in the position of never being able to meet standard 4(a) in these herd units in the foreseeable future (even while elk continue to thrive).
- The alternative methodology proposed in the Forest Plan amendment—the percentage of an elk herd unit occupied by elk security areas—indicates that overall elk security in the Blackfoot landscape is adequate. This measure of security, unlike the Forest Plan standard, is sensitive to changes in open road configuration—pointing out where management is effective and where it needs to improve.
- By introducing reasonably measurable criteria as part of the formula for gauging the level of security needed in a given herd unit, the new standard provides a more realistic means of guiding travel management on the Forest.

In conclusion, Forest Plan big game standard 4(a), inaccurately depicts the nature of elk security in the Blackfoot landscape, is insensitive to changing road densities, and places unnecessary and impractical constraints on travel management. Meanwhile, the more recently developed elk security area methodology provides a reasonably accurate picture of elk security across the landscape, is responsive to proposed changes in open motorized route patterns, and correctly directs management to areas that need further attention.

Although this amendment eliminates cover measurements as part of the determination of elk security, it does not change other elk or big game related standards relative to the analysis and maintenance of cover, notably big game standards 1, 2, 3, and 5. Big game standards 4b thru 4h and 6 regarding road management activities are also still in effect.

Current elk numbers are well above those established as benchmarks in the 1986 Forest Plan, benchmarks intended to ensure that elk remain viable on the Helena National Forest.

# Maps

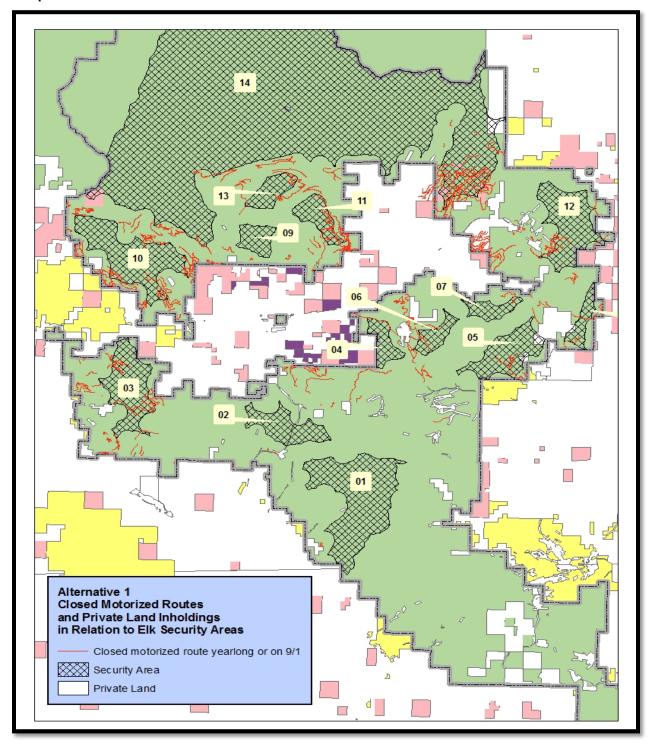


Figure F- 2. Closed motorized routes and private land inholdings in relation to elk security areas in alternative  $\mathbf{1}^{10}$ 

<sup>&</sup>lt;sup>10</sup> The closed routes are either closed yearlong or have a seasonal restriction during the hunting season (9/1-12/1). All closed routes that meet this criterion are shown on the figure; however, of note are those routes

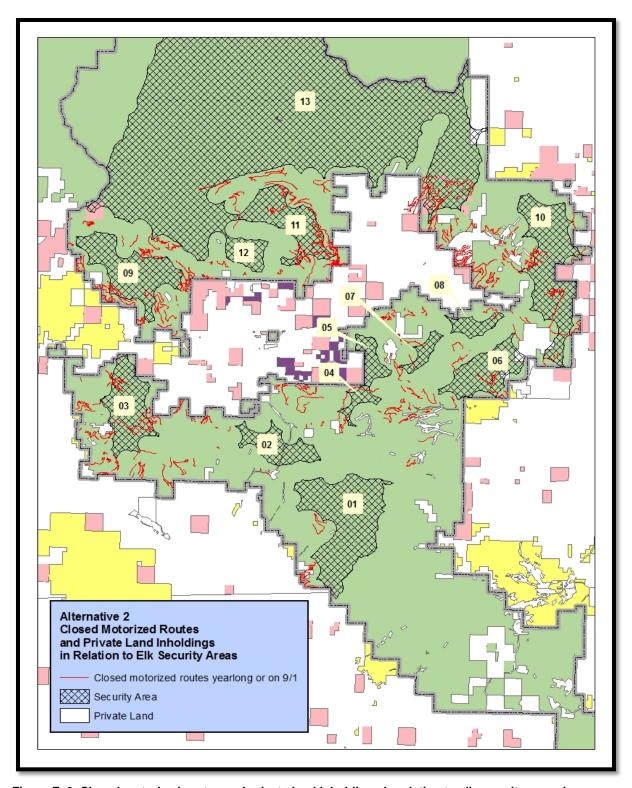


Figure F- 3. Closed motorized routes and private land inholdings in relation to elk security areas in alternative 2 (see footnote 10 for figure F-2).

that are adjacent to or within elk security areas as these are the routes that could potentially receive administrative use during the hunting season.

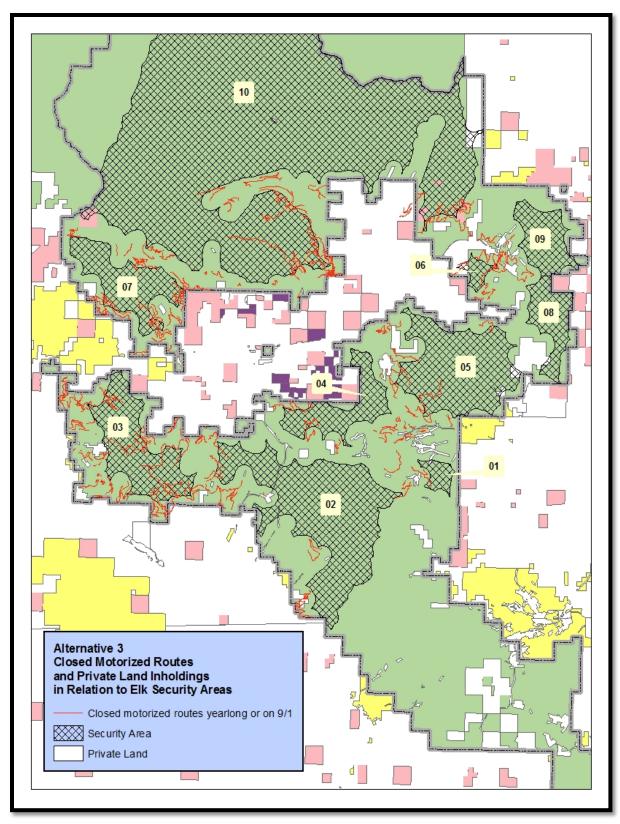


Figure F- 4. Closed motorized routes and private land inholdings in relation to elk security areas in alternative 3 (see footnote 10 for figure F-2)

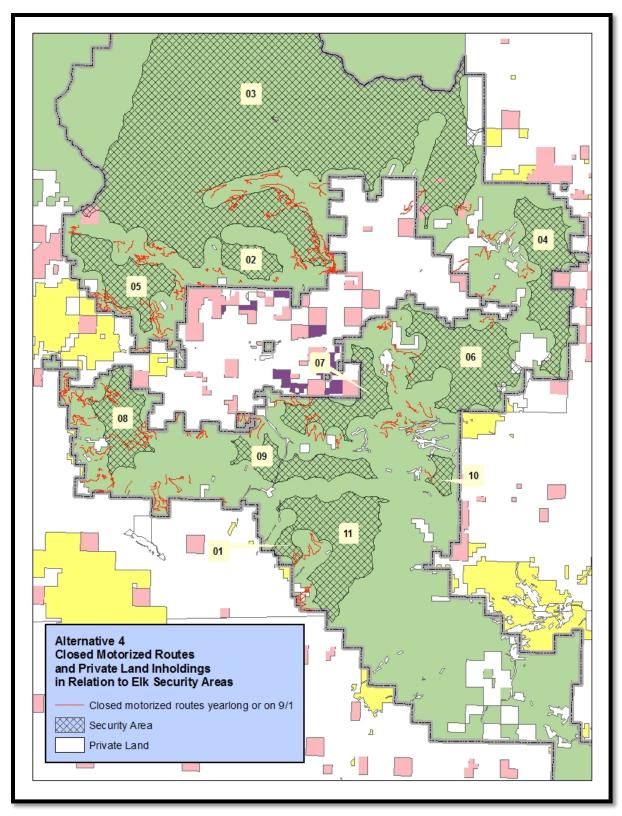


Figure F- 5. Closed motorized routes and private land inholdings in relation to elk security areas in alternative 4 (see footnote 10 for figure F-2)

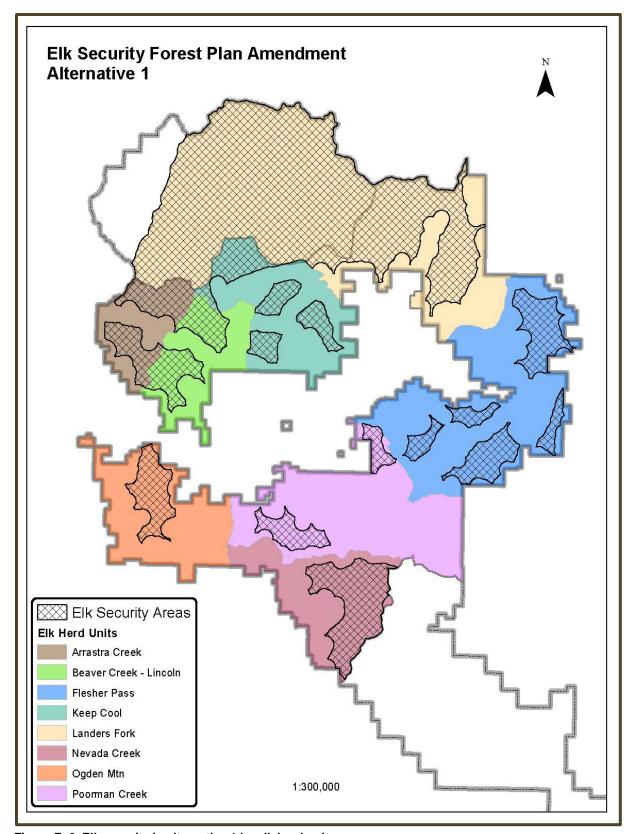


Figure F- 6. Elk security in alternative 1 by elk herd units

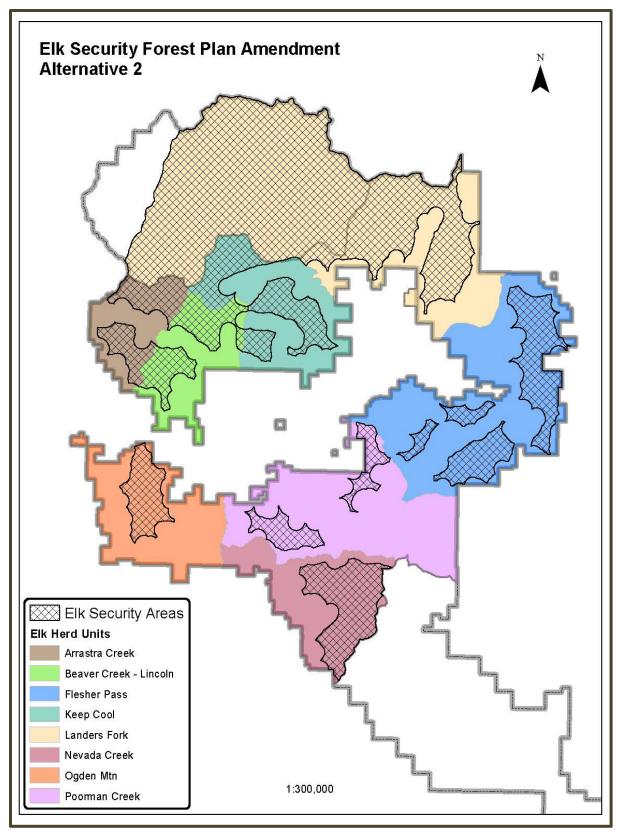


Figure F-7. Elk security in alternative 2 by elk herd unit

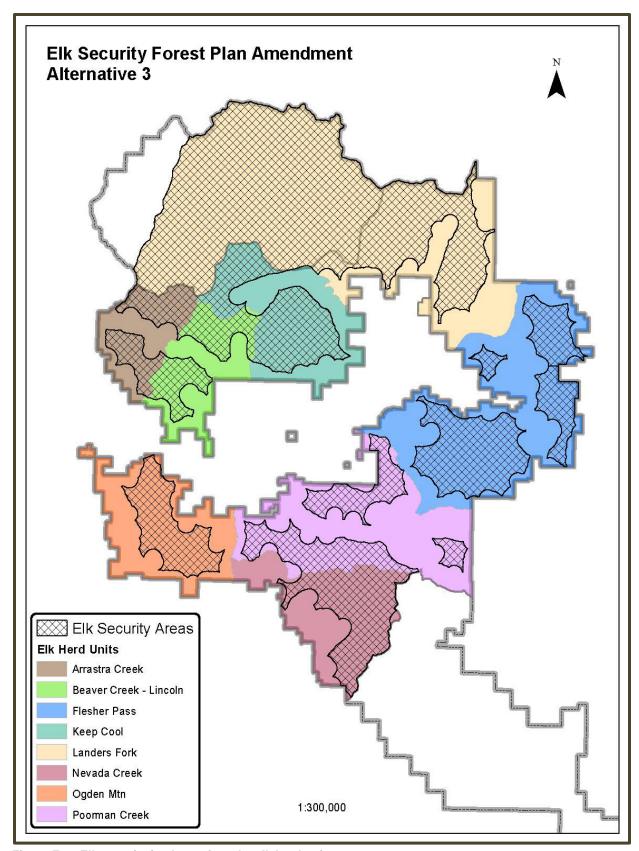


Figure F- 8. Elk security in alternative 3 by elk herd unit

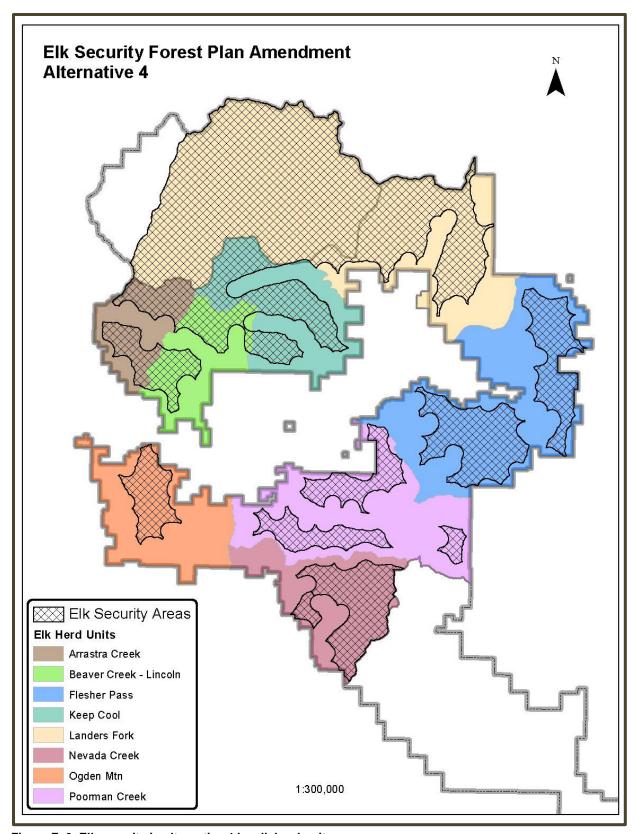


Figure F- 9. Elk security in alternative 4 by elk herd unit

# Compatibility of Forest Plan Amendment Alternative B-Preferred Alternative with Existing Wildlife Standards

Table F- 8. Existing wildlife standards and compatibility with Forest Plan big game security amendment

#### Compatibility with big game security **Standards** Forest Plan amendment alternative B Forest Wide Wildlife and Fish Indicator Species Standard 1. Populations of wildlife "indicator species" will be monitored to measure the effect of management activities on representative wildlife habitats with the objective of ensuring that viable populations of existing native and desirable non-native plant and animal species are maintained. See Chapter IV, part D Monitoring and Evaluation for specific monitoring requirements. Indicator species have been identified for those species groups whose habitat Alternative B is compatible with this is most likely to be changed by Forest management activities. The mature tree dependent group indicator species standard. is the marten; the old growth dependent group is represented by the pileated woodpecker and the goshawks; the snag dependent species group is represented by the hairy woodpecker; the threatened and endangered species include grizzly bear, gray wolf, bald eagle and peregrine falcon; commonly hunted indicator species are elk, mule deer and bighorn sheep; fish indicator species is the cutthroat trout. Forest Wide Big Game Standards Big Game - 1. On important summer (see Glossary) and winter range, adequate thermal and hiding cover will be Alternative B is compatible with this maintained to support the habitat potential. standard. 2. An environmental analysis for project work will include a cover analysis. The cover analysis should be done on Alternative B is compatible with this drainage or elk herd unit basis. (See Montana Cooperative Elk-Logging Study in Appendix C for recommendations standard. and research findings on how to maintain adequate cover during project work.) Subject to hydrologic and other resource constraints, elk summer range will be maintained at 35 percent or Alternative B is compatible with this greater hiding cover and areas of winter range will be maintained at 25 percent or greater thermal cover in standard. drainages or elk herd units.

#### **Standards**

Compatibility with big game security Forest Plan amendment alternative B

- 4. Implement an aggressive road management program to maintain or improve big game security. To decide which roads, trails, and areas should be restricted and opened, the Forest will use the following guidelines developed with the Montana Department of Fish, Wildlife, and Parks (MFWP). The Forest visitor map will document the road management program.
- 4a. Road management will be implemented to at least maintain big game habitat capability and hunting opportunity. To provide for a first week bull elk harvest that does not exceed 40 percent of the total bull harvest, roads will be managed during the general big game hunting season to maintain open road densities with the following limits.

Existing Percent Hiding cover (according to FS definition of hiding cover) (1)	Existing Percent Hiding Cover (according to MFWP definition of hiding cover) (2)	Max Open Road Density
56	80	2.4 mi/mi (2)
49	70	1.9 mi/mi (2)
42	60	1.2 mi/mi (2)
35	50	0.1 mi/mi (2)
(1) A timber stand which conceals 90 percent or more of a standing elk at 200 feet.	(2) A stand of coniferous trees having a crown closure of greater than 40 percent.	

The existing hiding cover to open road density ratio should be determined over a large geographic area, such as a timber sale analysis area, a third order drainage, or an elk herd unit.

Alternative B furthers the intent of this standard by providing a metric that is sensitive to changes in open road configuration—pointing out where management is effective and where it needs to improve.

4b. Elk calving grounds and nursery areas will be closed to motorized vehicles during peak use by elk. Calving is usually in late May through mid-June and nursery areas are used in late June through July.

Alternative B is compatible with this standard

4c. All winter range areas will be closed to vehicles between December 1 and May 15. Exceptions (i.e., access through the winter range to facilitate land management or public use activities on other lands) may be granted.

Alternative B is compatible with this standard

Standards	Compatibility with big game security Forest Plan amendment alternative B
4d. At restricted roads, trails, and areas, signs will be posted which tell:	
<ol> <li>Type of restriction.</li> <li>Reason for restriction.</li> <li>Time period of restriction.</li> </ol>	Alternative B is compatible with this standard
4. Cooperating agencies.	
4e. Roads that will be closed will be signed during construction or reconstruction telling the closure date and the reason for closure.	Alternative B is compatible with this standard
4f. Enforcement is a shared responsibility. Enforcement needs will be coordinated with the MFWP.	Alternative B is compatible with this standard
4g. Opened Forest roads will normally have a designed speed of less than 15 miles per hour. Exact design speeds will be determined through project planning. Loop roads are not recommended and will be avoided in most cases.	
4h. The Forest Road Management Program will be developed in conjunction with MFWP and interested groups or individuals. The Road Management Program will contain the specific seasonal and yearlong road, trail, and area restrictions and will be based on the goals and objectives of the management areas in Chapter III of the Forest Plan.	Alternative B is compatible with this standard
4i. Representatives from the Helena Forest and MFWP will meet annually to review the existing Travel Plan.	Alternative B is compatible with this standard
5. On elk summer range the minimum size area for hiding cover will be 40 acres and the minimum size area on winter range for thermal cover will be I5 acres.	Alternative B is compatible with this standard
6. Montana Cooperative Elk-Logging Study Recommendations, in Appendix C, will be followed during timber sale and road construction projects.	Alternative B is compatible with this standard
7. Inventorying and mapping important big game summer/fall and winter ranges will continue.	Alternative B is compatible with this standard
8. Any proposed sagebrush reduction programs will be analyzed on a case-by-case basis for the possible impact on big game winter range.	Alternative B is compatible with this standard
9. Occupied bighorn sheep and mountain goat range will be protected during resource activities. Project plans for livestock, timber, or other resource development will include stipulations to avoid or mitigate impacts on their range. Conflicts between livestock and these wildlife species will be resolved in favor of the big game.	Alternative B is compatible with this standard
10. Moose habitat will be managed to provide adequate browse species diversity and quantity to support current moose populations.	Alternative B is compatible with this standard
Forest Wide Threatened and Endangered (T&E) Species Standards	

Standards	Compatibility with big game security Forest Plan amendment alternative B
1. A biological evaluation will be written for all projects that have potential to impact any T&E species or its habitat. All evaluations will address each projects potential to adversely modify a listed species habitat or behavior. If an adverse impact is determined, mitigation measures will be developed to avoid any adverse modification of a listed species habitat or behavior. If all possible mitigation measures do not result in a no affect determination, then informal and/or formal consultation with the U.S. Fish and Wildlife Service will be initiated.	Alternative B is compatible with this standard
2. Grizzly bear Apply the guidelines in Appendix D to the Management Situation 1 and 2 (referred to essential and occupied prior to 1984) grizzly bear habitat on the Forest (see map in Appendix D).  Initiate field studies in undesignated areas known to be used by grizzlies, to determine if the areas should be designated as grizzly habitat. Until sufficient evidence is available to determine the status of these areas, manage them according to Appendix E, Grizzly Management Guidelines Outside of Recovery Areas.	Alternative B is compatible with this standard
3. In occupied grizzly habitat, to minimize man-caused mortality the open road density will not exceed the 1980 density of 0.55 miles per square mile, which was determined to have little effect on habitat capability.	Alternative B is compatible with this standard
4. Research activity on grizzly bears or their habitat will be reviewed by the Research Subcommittee of the Interagency Grizzly Bear Committee.	Alternative B is compatible with this standard
5. Bald Eagle and Peregrine Falcon Continue working with the MFWP, the USFWS, and the BLM to identify nesting and wintering areas. Identify nesting territories and roosting sites, and protect both from adverse habitat alteration. (Guidelines for how to identify bald eagle habitat are in the Wildlife Planning Records.) Powerlines constructed within bald eagle or peregrine falcon habitat will be designed to protect raptors from electrocution. See Appendix D for bald eagle and peregrine falcon habitat maps.	Alternative B is compatible with this standard
6. Gray Wolf With the USFWS and MFWP, investigate reported gray wolf observations to confirm or deny gray wolf presence. If presence of gray wolf is confirmed, determine if the habitat is necessary for the wolves' recovery. If the habitat is necessary, coordinate with the MFWP and the USFWS to implement the Wolf Recovery Plan. See Appendix D for gray wolf habitat map.	
7. No known threatened or endangered plants are on the Helena National Forest.	Alternative B is compatible with this standard

#### Compatibility with big game security **Standards** Forest Plan amendment alternative B 8. Species of Special Concern There are habitats on the Forest where the following species of special concern may be found (Plant Species of Special Concern. USDA-FS. 1980) Lemhi penstemon (Penstemon lemhiensis) Howell's gumweed (Grindelia howellii) Missoula phlox (Phlox missoulensis) Cliff toothwort (Cardamine rupicola) Missoula phlox and cliff toothwort have been located on the Helena Forest. Alternative B is compatible with this Other Plants that are termed rare have also been located on the Helena Forest. They are Klaus' bladderpod standard (Lesquerella plausii) and Long-styled thistle (Cirsium longistylum). Two additional rare plants, Moschatel (Adoxa moschalellina) and Lesser rushy milkvetch (Astragalus connvallarius) are believed to occur on the Helena Forest but currently have no occurrence records. If any of these species are verified on the Helena Forest, appropriate measures, pursuant to Section 7 of the Endangered Species Act, will be taken. Forestwide Old Growth Standards An old-growth stand is generally characterized by a high level of standing and down, dead and rotting woody material; two or more levels of tree canopies and a high degree of decadence indicated by heart rot, mistletoe, dead or broken tree tops, and moss. Five percent of each third order drainage should be managed for old growth. The priority for old growth acres Alternative B is compatible with this within each drainage is: first, land below 6000 feet in elevation; second, riparian zones and mesic drainage heads; standard and third, management areas emphasizing wildlife habitat. These areas will normally be managed on a 240 year rotation and will range from 10 acres to several hundred acres. Management areas other than T-1 through T-5 will be the primary source for old growth. However, if adequate old growth area cannot be achieved then the T management areas will be considered to meet old growth objectives. Forestwide Snag Standards 1. To keep an adequate snag resource (standing dead trees) through the planning horizon, snags should be Alternative B is compatible with this managed at 70 percent of optimum (average of 2 snags/acre) within each third order drainage. standard 2. Snag management guidelines need not be applied within a quarter mile of riparian areas, because riparian Alternative B is compatible with this standards should provide for adequate snags. standard 3. Larch, ponderosa pine, Douglas-fir, spruce, and subalpine fir, in that priority, are the preferred species for snags Alternative B is compatible with this and replacement trees (live trees left to replace existing snags). standard

Standards	Compatibility with big game security Forest Plan amendment alternative B
4. Management areas other than T-1 should be the primary source for snag management. However, if adequate snags cannot be found outside of T-1, then the following numbers and sizes of snags should be retained in cutting units, if available.	
A. In units with snags, keep a minimum of 20 snags and 10 replacement trees per 10 acres, if available. If 20 snags are not available, then any combination totaling 30 should be left, by the following d.b.h classes:  13 snags and 6 replacement trees from 7-11 inches	
5 snags and 3 replacement trees from 12-19 inches	
2 snags and 1 replacement trees 20+ inches	
B. In unitsexcept those of pure lodgepolewithout snags keep a minimum of 30 wind firm trees per 10 acres, if	Alternative B is compatible with this standard
available, by the following d.b.h classes:	
21 trees from 7-11 inches	
7 trees from 12-19 inches	
2 trees from 20+ inches	
If wildlife funds are available, a third of the replacement trees should be girdled or otherwise killed to provide snags, by the following d.b.h classes:	
7 trees from 7-11 inches d.b.h	
2 trees from 12-19 inches d.b.h	
1 tree from 20+ inches d.b.h	
Management Area A-1	
Wildlife and Fisheries – Habitat improvement activities will emphasize nongame species.	Alternative B is compatible with this standard
Management Area M-1	
Wildlife and Fisheries - Management practices to maintain or improve wildlife habitat will be permitted where necessary to meet the objectives of adjacent management areas.	Alternative B is compatible with this standard
Management Area N1	
Wildlife and Fisheries – Wildlife habitat improvements are not permitted.	Alternative B is compatible with this standard
Management Area L-1	

Standards	Compatibility with big game security Forest Plan amendment alternative B
Wildlife and Fisheries - Specific wildlife and fisheries needs will be identified and considered when developing allotment management plans, provided the needs are compatible with area goals.  - Habitat improvement projects will be scheduled when they would help achieve the area goals.	Alternative B is compatible with this standard
Management Area L-2	
Wildlife and Fisheries - Wildlife habitat improvement practices, including road management, prescribed fire, and other techniques, may be used to maintain and/or enhance the quality of big game winter range. Projects will be coordinated for livestock and big game needs.	Alternative B is compatible with this standard
- Maintain adequate thermal and hiding cover adjacent to forage areas. Generally this means providing at least 25 percent thermal cover, where available, on identified winter range.	Stanuaru
Management Area R1	
Wildlife and Fisheries – Habitat improvement projects, such as prescribed fire and water developments, may be used to maintain or improve the fish and wildlife habitat, if the projects are compatible with the area's goals.	Alternative B is compatible with this standard
Management Area T-1	
Wildlife and Fisheries - Wildlife and fisheries habitat improvement projects may be implemented, provided they are compatible with the management area goals.	Alternative B is compatible with this standard
- Forest-Wide Standards and Appendix D contain guidance for T&E species habitat.	
Management Area T-2	
Wildlife and Fisheries – Wildlife habitat improvement practices, including road management, prescribed fire, and other techniques, may be used to maintain and/or enhance the quality of big game winter habitat.	Alternative B is compatible with this
-Maintain adequate thermal and hiding cover adjacent to forage areas. Generally this means providing at least 25 percent thermal cover, on identified winter range.	standard
Management Area T-3	
Wildlife and Fisheries - Maintain a minimum of 35 percent hiding cover for big game.	
- Maintain thermal cover adjacent to forage areas. Appendix C provides guidance for thermal cover.	Alternative B is compatible with this
- Wildlife habitat improvement practices, including road management, prescribed fire, and timber harvest, may be used to maintain and/or enhance the quality of big game summer habitat.	standard
Management Area T-4	
Wildlife and Fisheries – Where elk habitat exists, project design will incorporate management practices to maintain or enhance summer and winter habitat to the extent that the VQOs for the area are met.	Alternative B is compatible with this standard
-Wildlife and fisheries habitat improvement projects may be implemented provided they are compatible with the management area goals.	
Management Area T-5	

#### **Standards**

Wildlife and Fisheries –Wildlife and fisheries habitat improvement projects may be implemented, provided they are compatible with the management area goals.

-Maintain adequate thermal and hiding cover adjacent to forage areas, provided timber harvest volumes are not significantly reduced over the rotation period.

#### Management Area W-1

Wildlife and Fisheries –Wildlife habitat improvement practices, including road management, prescribed fire, and other techniques, will be used to maintain and/or enhance the quality of big game and nongame habitat.

-Maintain adequate thermal and hiding cover adjacent to forage areas. Generally this means providing at least 25 percent cover, where available, on identified winter range.

#### Management Area W-2

Wildlife and Fisheries – Most new roads and about 50% of existing roads will be closed, at least seasonally.

-Wildlife habitat improvement practices, including road management, prescribed fire, and other techniques, will be used to maintain and/or enhance big game calving and summer habitat.

-Maintain adequate thermal and hiding cover adjacent to forage areas.

#### Management Area P-1

Wildlife and Fisheries – Fish and wildlife management in the complex will be consistent with Policies and Guidelines for Fish and Wildlife Management in Wildernesses and Primitive Areas adopted by the Forest Service, Bureau of Land Management, and the International Association of Fish and Wildlife Agencies. This document is part of the Forest Planning records in the Helena Forest Supervisors office.

-Managers will consult annually with personnel from the Montana Department of Fish, Wildlife and Parks relative to levels of harvest appropriate for maintaining native hunted and trapped species as part of the wilderness resource.

-Natural processes such as fire, wind, and insect and disease activity will be the only agents permitted to influence vegetation and its associated wildlife in the wilderness. No new exclosure structures will be installed.

-The conservation of threatened and endangered species and their habitats will receive high priority in management of the wilderness resource.

-The grizzly bear will continue to be a part of the wilderness experience. The public will be kept informed of known grizzly problem areas, but use will generally not be restricted from these areas. Education of bear avoidance techniques will be emphasized. Forest Supervisors will direct the development of more detailed standards necessary to protect both the bear and wilderness visitors. These standards will be consistent with Forest-wide standards for grizzly bear management in occupied grizzly bear habitat, and will be incorporated into the Forest Plan through amendment.

# Compatibility with big game security Forest Plan amendment alternative B

Alternative B is compatible with this standard

Alternative B furthers the intent of this standard by providing a metric that is sensitive to changes in open road configuration—pointing out where management is effective and where it needs to improve.

Alternative B furthers the intent of this standard by providing a metric that is sensitive to changes in open road configuration—pointing out where management is effective and where it needs to improve.

Alternative B is compatible with this standard

Table F- 9. Northern Rockies lynx management direction

Northern Rockies Lynx Management Direction(NRLMD)	
Management Standards	Compatibility of Alternative B with Existing Standards
Standard ALL S1	
New or expanded permanent developments and vegetation management projects must maintain habitat connectivity in an LA1 and/or linkage area.	Alternative B is compatible with this standard
Guideline ALL G1	
Methods to avoid or reduce effects on lynx should be used when constructing or reconstructing highways or forest highways across federal land. Methods could include fencing, underpasses or overpasses.	Alternative B is compatible with this standard
Standard LAU S1	
Changes in LAU boundaries shall be based on site-specific habitat information and after review by the Forest Service Regional Office.	Alternative B is compatible with this standard

#### **Vegetation Management Projects (VEG)**

The following objectives, standards and guidelines apply to vegetation management projects in lynx habitat in lynx analysis units (LAU). With the exception of Objective VEG O3 that specifically concerns wildland fire use, the objectives, standards and guidelines do not apply to wildfire suppression, wildland fire use, or removal of vegetation for permanent developments like mineral operations, ski runs, roads and the like. None of the objectives, standards, or guidelines applies to linkage areas.

Standard VEG S1 - Stand initiation structural stage limits

Standard VEG S1 applies to all vegetation management projects that regenerate timber, except for fuel treatment projects within the wildland urban interface (WUI) as defined by HFRA, subject to the following limitation:

Fuel treatment projects within the WUI that do not meet Standards VEG S1, VEG S2, VEG S5, and VEG S6 may occur on no more than 6 percent (cumulatively) of lynx habitat on each administrative unit (a unit is a National Forest).

For fuel treatment projects within the WUI see guideline VEG G10.

Alternative B is compatible with this standard

**The Standard:** Unless a broad scale assessment has been completed that substantiates different historic levels of stand initiation structural stages limit disturbance in each LAU as follows:

If more than 30 percent of the lynx habitat in an LAU is currently in a stand initiation structural stage that does not yet provide winter snowshoe hare habitat, no additional habitat may be regenerated by vegetation

Northern Rockies Lynx Management Direction(NRLMD)	
Management Standards	Compatibility of Alternative B with Existing Standards

management projects.

Standard VEG S2 - Limits on regeneration from timber mgmt. projects

Standard VEG S2 applies to all vegetation management projects that regenerate timber, except for fuel treatment projects within the wildland urban interface (WUI) as defined by HFRA, subject to the following limitation:

Fuel treatment projects within the WUI that do not meet Standards VEG S1, VEG S2, VEG S5, and VEG S6 may occur on no more than 6 percent (cumulatively) of lynx habitat on each administrative unit (a unit is a National Forest).

Alternative B is compatible with this standard

For fuel treatment projects within the WUI see guideline VEG G10.

**The Standard:** Timber management projects shall not regenerate more than 15 percent of lynx habitat on NFS lands in an LAU in a ten-year period.

Guideline VEG G11 - Denning Habitat

Denning habitat should be distributed in each LAU in the form of pockets of large amounts of large woody debris, either down logs or root wads, or large piles of small wind thrown trees ("jack-strawed" piles). If denning habitat appears to be lacking in the LAU, then projects should be designed to retain some coarse woody debris, piles, or residual trees to provide denning habitat in the future.

Alternative B is compatible with this standard

Standard VEG S5 - Precommercial thinning limits

Standard VEG S5 applies to all precommercial thinning projects, except for fuel treatment projects that use precommercial thinning as a tool within the wildland urban interface (WUI) as defined by HFRA, subject to the following limitation:

Fuel treatment projects within the WUI that do not meet Standards VEG S1, VEG S2, VEG S5, and VEG S6 may occur on no more than 6 percent (cumulatively) of lynx habitat on each administrative unit (a unit is a National Forest).

Alternative B is compatible with this standard

For fuel treatment projects within the WUI see guideline VEG G10.

**The Standard:** Precommercial thinning projects that reduce snowshoe hare habitat, may occur from the stand initiation structural stage until the stands no longer provide winter snowshoe hare habitat only:

Northern Rockies Lynx Management Direction(NRLMD)	
Management Standards	Compatibility of Alternative B with Existing Standards

- 1. Within 200 feet of administrative sites, dwellings, or outbuildings; or
- 2. For research studies or genetic tree tests evaluating genetically improved reforestation stock; or

Based on new information that is peer reviewed and accepted by the regional levels of the Forest Service and FWS, where a written determination states:

that a project is not likely to adversely affect lynx; or

that a project is likely to have short term adverse effects on lynx or its habitat, but would result in long-term benefits to lynx and its habitat; or

- 4. For conifer removal in aspen, or daylight thinning around individual aspen trees, where aspen is in decline; or
- 5. For daylight thinning of planted rust-resistant white pine where 80 % of the winter snowshoe hare habitat is retained; or
- 6. To restore whitebark pine.

Standard VEG S6 - Multi-storied stands & snowshoe hare horizontal cover

Standard VEG S6 applies to all vegetation management projects that regenerate timber, except for fuel treatment projects within the wildland urban interface (WUI) as defined by HFRA, subject to the following limitation:

Fuel treatment projects within the WUI that do not meet Standards VEG S1, VEG S2, VEG S5, and VEG S6 may occur on no more than 6 percent (cumulatively) of lynx habitat on each administrative unit (a unit is a National Forest).

For fuel treatment projects within the WUI see guideline VEG G10.

Alternative B is compatible with this standard

**The Standard:** Vegetation management projects that reduce snowshoe hare habitat in multi-story mature or late successional forests<sup>29</sup> may occur only:

- 1. Within 200 feet of administrative sites, dwellings, outbuildings, recreation sites, and special use permit improvements, including infrastructure within permitted ski area boundaries; or
- 2. For research studies or genetic tree tests evaluating genetically improved reforestation stock; or

Northern Rockies Lynx Management Direction(NRLMD)		
Management Standards	Compatibility of Alternative B with Existing Standards	
3. For incidental removal during salvage harvest (e.g. removal due to location of skid trails).		
(NOTE: Timber harvest is allowed in areas that have potential to improve winter snowshoe hare habitat but presently have poorly developed understories that lack dense horizontal cover [e.g. uneven age management systems could be used to create openings where there is little understory so that new forage can grow]).		
Guideline VEG G1 – Lynx habitat improvement		
Vegetation management projects should be planned to recruit a high density of conifers, hardwoods, and shrubs where such habitat is scarce or not available. Priority should be given to stem-exclusion, closed-canopy structural stage <i>stands for lynx or their prey</i> (e.g. mesic, monotypic lodgepole stands).  Winter snowshoe hare habitat should be near denning habitat.	Alternative B is compatible with this standard	
Guideline VEG G4 – Prescribed Fire		
Prescribed fire activities should not create permanent travel routes that facilitate snow compaction. Constructing permanent firebreaks on ridges or saddles should be avoided.	Alternative B is compatible with this standard	
Guideline VEG G5 – Habitat for alternate prey species Habitat for alternate prey species, primarily red squirrel, should be provided in each LAU.	Alternative B is compatible with this standard	
Guideline VEG G10 – Fuel treatments in the WUI		
Fuel treatment projects in the WUI as defined by HFRA should be designed considering standards VEG S1, S2, S5, and S6 to promote lynx conservation.	Alternative B is compatible with this standard	
Livestock Management (GRAZ)		
The following objectives and guidelines apply to grazing projects in lynx habitat in lynx analysis units (LAU). They	do not apply to linkage areas.	
Guideline GRAZ G1 – Livestock grazing and openings		
In fire- and harvest-created openings, livestock grazing should be managed so impacts do not prevent shrubs and trees from regenerating.	Alternative B is compatible with this standard	
Guideline GRAZ G2 – Livestock grazing and aspen		
In aspen stands, livestock grazing should be managed to contribute to the long-term health and sustainability of aspen.	Alternative B is compatible with this standard	
Guideline GRAZ G3 – Livestock grazing and riparian areas & willow carrs		
In riparian areas and willow carrs, livestock grazing should be managed to contribute to maintaining or achieving a preponderance of mid- or late-seral stages, similar to conditions that would have occurred under historic disturbance regimes.	Alternative B is compatible with this standard	

Northern Rockies Lynx Management Direction(NRLMD)		
Management Standards	Compatibility of Alternative B with Existing Standards	
Guideline GRAZ G4 – Livestock grazing and shrub-steppe habitats		
In shrub-steppe habitats, livestock grazing should be managed in the elevation ranges of forested lynx habitat in LAUs, to contribute to maintaining or achieving a preponderance of mid- or late-seral stages, similar to conditions that would have occurred under historic disturbance regimes.	Alternative B is compatible with this standard	
Human Use Projects (HU)		
The following objectives and guidelines apply to human use projects, such as special uses (other than grazing), re and mineral and energy development, in lynx habitat in lynx analysis units (LAU), subject to valid existing rights. The projects or grazing projects directly. They do not apply to linkage areas.		
Guideline HU G1 – Ski area expansion & development, inter-trail islands		
When developing or expanding ski areas, provisions should be made for adequately sized inter-trail islands that include coarse woody debris, so winter snowshoe hare habitat is maintained.	Alternative B is compatible with this standard	
Guideline HU G2 – Ski are expansion & development, foraging habitat		
When developing or expanding ski areas, foraging should be provided consistent with the ski area's operational needs, especially where lynx habitat occurs as narrow bands of coniferous forest across mountain slopes.	Alternative B is compatible with this standard	
Guideline HU G3 – Recreation developments		
Recreation developments and operations should be planned in ways that both provide for lynx movement and maintain the effectiveness of lynx habitat.	Alternative B is compatible with this standard	
Guideline HU G4 – Mineral & energy development		
For mineral and energy development sites and facilities, remote monitoring should be encouraged to reduce snow compaction.	Alternative B is compatible with this standard	
Guideline HU G5 – Mineral & energy development, habitat restoration		
For mineral and energy development sites and facilities that are closed, a reclamation plan that restores lynx habitat should be developed.	Alternative B is compatible with this standard	
Guideline HU G6 – Roads, upgrading		
Methods to avoid or reduce effects to lynx should be used in lynx habitat when upgrading unpaved roads to maintenance levels 4 or 5, if the result would be increased traffic speeds and volumes, or a foreseeable contribution to increases in human activity or development.	Alternative B is compatible with this standard	
Guideline HU G7 – Roads, locations		
New permanent roads should not be built on ridge-tops and saddles, or in areas identified as important for lynx habitat connectivity.	Alternative B is compatible with this standard	

Northern Rockies Lynx Management Direction(NRLMD)		
Management Standards	Compatibility of Alternative B with Existing Standards	
New permanent roads and trails should be situated away from forested stringers.		
Guideline HU G8 – Roads, brushing		
Cutting brush along low-speed, low-traffic-volume roads should be done to the minimum level necessary to provide for public safety.	Alternative B is compatible with this standard	
Guideline HU G9 – Roads, new		
On new roads built for projects, public motorized use should be restricted. Effective closures should be provided in road designs. When the project is over, these roads should be reclaimed or decommissioned, if not needed for other management objectives.	Alternative B is compatible with this standard	
Guideline HU G10 – Roads, ski area access		
When developing or expanding ski areas and trails, access roads and lift termini to maintain and provide lynx security habitat.	Alternative B is compatible with this standard	
Guideline HU G11 – Snow compaction		
Designated over-the-snow routes, or designated play areas, should not expand outside baseline areas of consistent snow compaction, unless designation serves to consolidate use and improve lynx habitat. This is calculated on an LAU basis, or on a combination of immediately adjacent LAUs.	Alternative B is compatible with this	
This does not apply inside permitted ski area boundaries, to winter logging, to rerouting trails for public safety, to accessing private inholdings, or to access regulated by Guideline HU G12.	standard	
Use the same analysis boundaries for all actions subject to this guideline.		
Guideline HU G12 – Winter access for non-recreation SUP & mineral & energy development		
Winter access for non-recreation special uses, and mineral and energy exploration and development, should be limited to designated routes or designated over-the-snow routes.	Alternative B is compatible with this standard	
Linkage Areas (LINK)		
The following objective, standard and guidelines apply to all projects within linkage areas, subject to valid existing rights.		
Standard LINK S1 – Highway or forest highway construction in linkage areas		
When highway or forest highway construction or reconstruction is proposed in linkage areas, identify potential highway crossings.	Alternative B is compatible with this standard	
Guideline LINK G1 – Land exchanges NFS lands should be retained in public ownership.	Alternative B is compatible with this standard	
Guideline LINK G2 – Livestock grazing in shrub-steppe habitats  Livestock grazing in shrub-steppe habitats should be managed to contribute to maintaining or achieving a	Alternative B is compatible with this	

Northern Rockies Lynx Management Direction(NRLMD)	
Management Standards	Compatibility of Alternative B with Existing Standards
preponderance of mid- or late-seral stages, similar to conditions that would have occurred under historic disturbance regimes.	standard
Required Monitoring	
Map the location and intensity of snow compacting activities, and designated and groomed routes that occurred inside LAUs during the period of 1998 to 2000. The mapping is to be completed within one year of this decision and changes in activities and routes are to be monitored every five years after the decision.	Alternative B is compatible with this standard
Annually report the number of acres where any of the exemptions 1 through 6 listed in Standard VEG S5 were applied. Report the type of activity, the number of acres, and the location (by unit, and LAU).	Alternative B is compatible with this standard
Report the acres of fuel treatment in lynx habitat within wildland urban interface as defined by HFRA when the project decision is approved. Report whether the fuel treatment met the vegetation standard. If standard(s) are not met, report, which standard(s) are not met and why, and how many acres were affected. Units will report to their respective USFS Regional Office. Region 1 of the USFS will consolidate all reports.	Alternative B is compatible with this standard

# Appendix G - Alternative Maps

The Forest Service uses the most current and complete data available. Geographical Information Systems (GIS) data and product accuracy may vary. Sources may be of differing accuracy, accurate only at certain scales, based on modeling or interpretation, incomplete while being created or revised, etc. Using GIS products for purposes other than those for which they were created may yield inaccurate or misleading results. The Forest Service reserves the right to correct, update, modify or replace GIS products without notification. For more information contact: Helena National Forest, 2880 Skyway Drive, Helena, Montana 59602 or call 406-449-5201

## Overall Roads and Trails – Large Maps

Maps G-1, G-2, G-3 and G-4 are in a map sleeve on the inside back cover of this document, Volume 2

- *G-1 Alternative 1 existing condition (large map of all roads and trails)*
- G-2 Alternative 2 proposed changes to existing condition (large map showing where changes would be made to the existing condition)
- G-3 Alternative 3 proposed changes to existing condition (large map showing where changes would be made to the existing condition)
- *G-4 Alternative 4 proposed changes to existing condition (large map showing where changes would be made to the existing condition)*

# Trails of Interest by Alternative (CDNST, Helmville-Gould and Stonewall)

- G-5 Alternative 1 Trails of interest
- G-6 Alternative 2 Proposed changes to trails of interest
- G-7 Alternative 3 Proposed changes to trails of interest
- G-8 Alternative 4 Proposed changes to trails of interest

#### Sections of the Continental Divide National Scenic Trail

- G-9 Proposed activities for Scapegoat Wilderness to Rogers Pass by alternative
- G-10 Proposed activities Rogers Pass to Flesher Pass by alternative
- G-11 Proposed activities Flesher Pass to Stemple Pass by alternative
- G-12 Proposed activities Stemple Pass to the planning area boundary by alternative

### **Stonewall Mountain Trail**

G-13 – Proposed activities for the Stonewall Mountain Trail by alternative

#### **Helmville Gould Trail**

G-14 – Proposed activities for the Helmville Gould Trail by alternative

### **Motorized Trails**

- $G-15-Alternative\ 1-Existing\ motorized\ trails$
- G-16 Alternative 2 Proposed changes to motorized trails
- G-17 Alternative 3 Proposed changes to motorized trails
- G-18– Alternative 4 Proposed changes to motorized trails

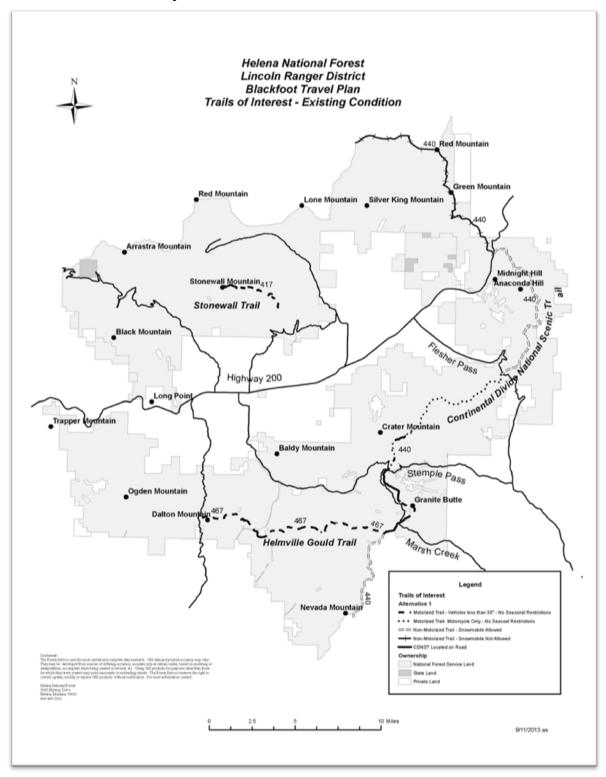
## **Non-Motorized Trails**

- G-19 Alternative 1 Existing non-motorized trails
- G-20 Alternative 2 Proposed changes to non-motorized trails
- G-21 Alternative 3 Proposed changes to non-motorized trails
- G-22 Alternative 4 Proposed changes to non-motorized trails

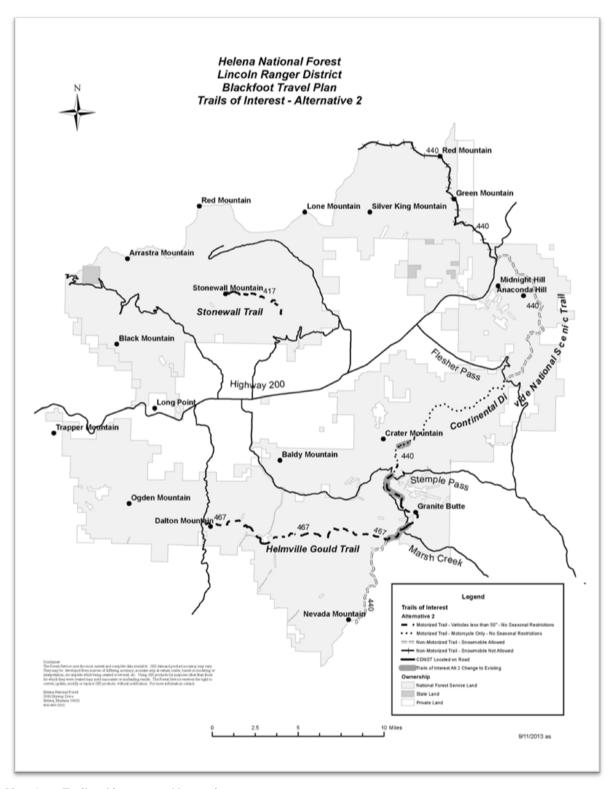
## **Mountain Bike Routes**

- G-23 Alternative 2 Proposed mountain bike routes
- G-24 Alternative 3 Proposed mountain bike routes
- G-25 Alternative 4 Proposed mountain bike routes

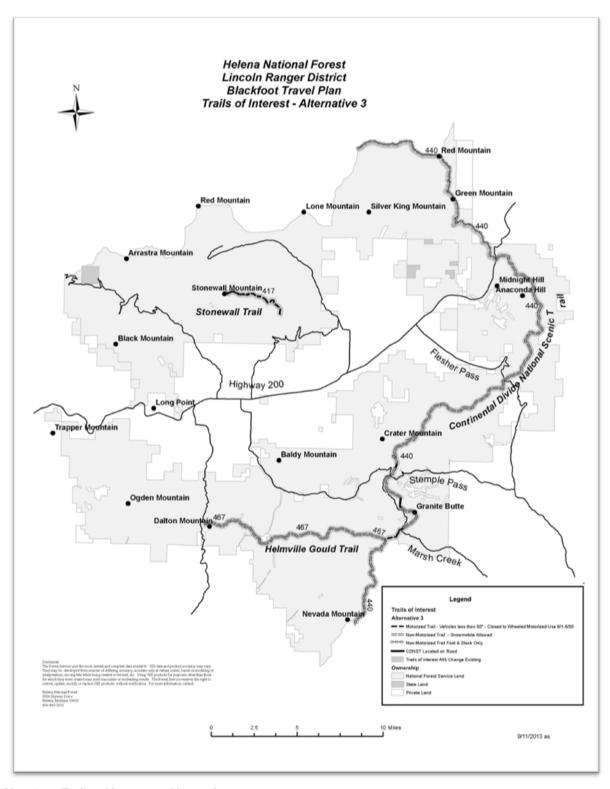
# Trails of Interest by Alternative



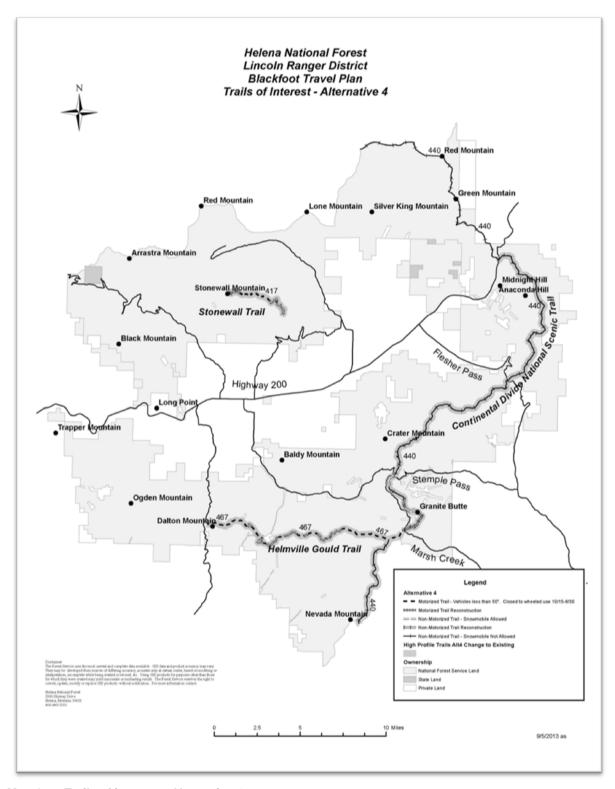
Map G- 5. Trails of interest – Alternative 1-existing condition (no change)



Map G- 6. Trails of interest - Alternative 2

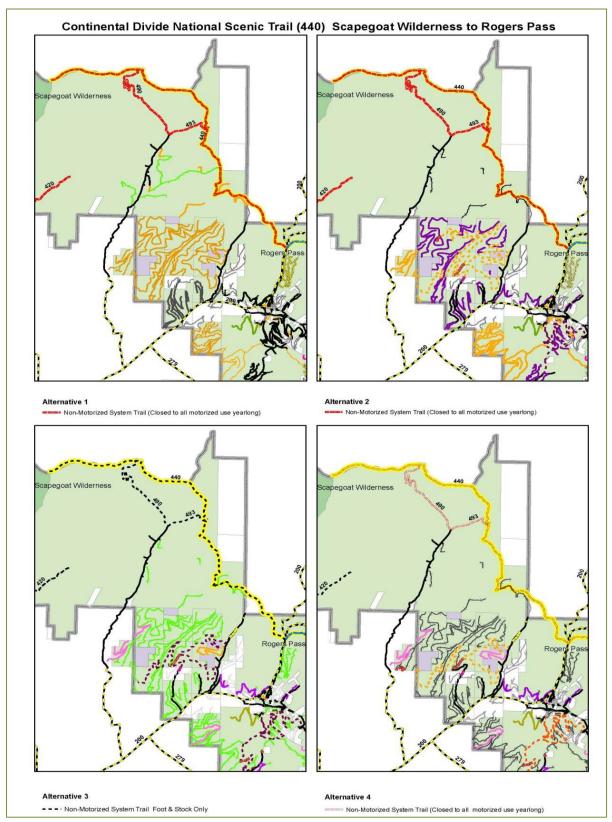


Map G-7. Trails of interest - Alternative 3

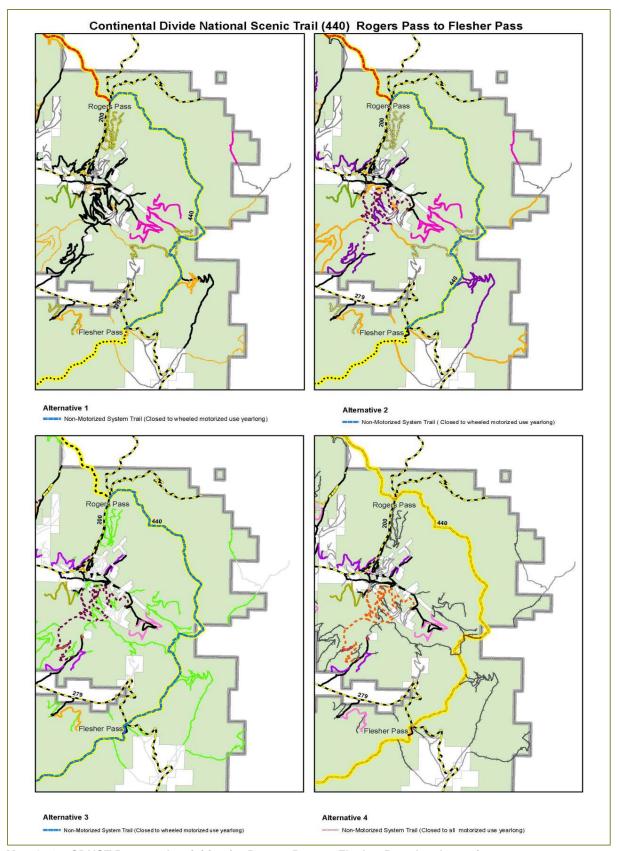


Map G-8. Trails of interest - Alternative 4

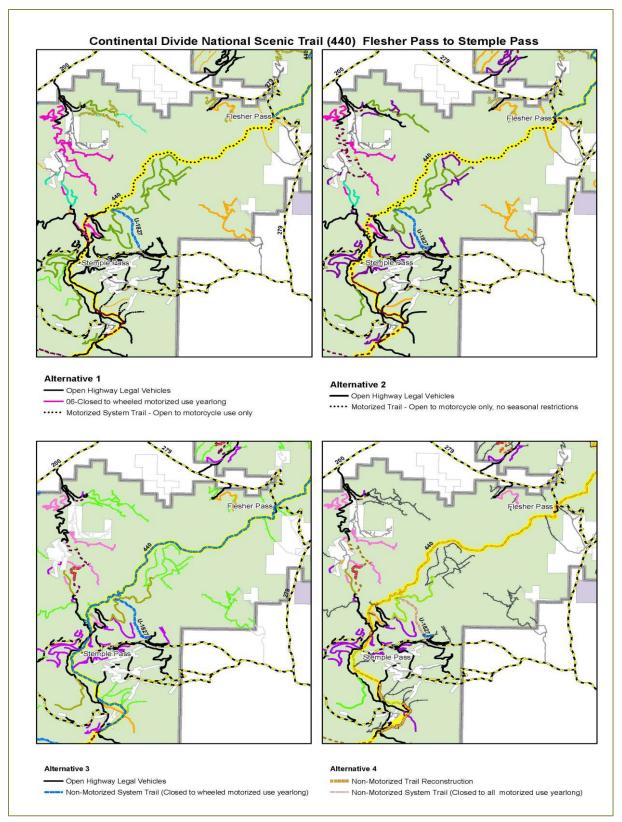
# Sections of the Continental Divide National Scenic Trail



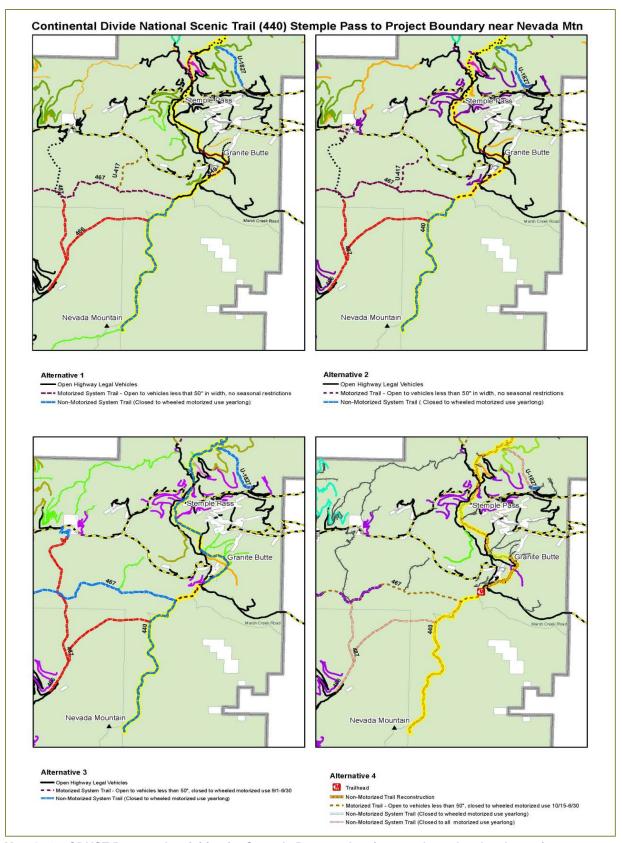
Map G- 9. CDNST Proposed activities for Scapegoat Wilderness to Rogers Pass by alternative



Map G- 10. CDNST Proposed activities for Rogers Pass to Flesher Pass by alternative

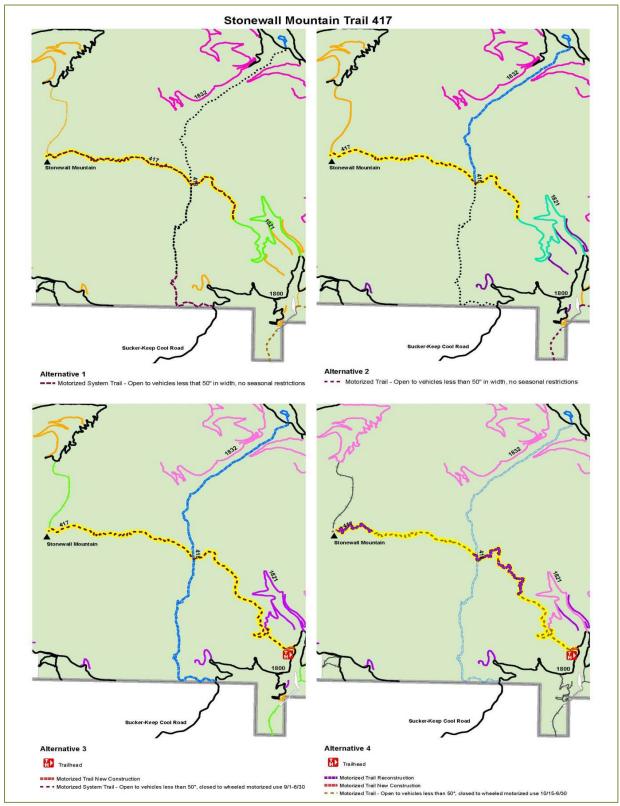


Map G- 11. CDNST Proposed activities for Flesher Pass to Stemple Pass by alternative



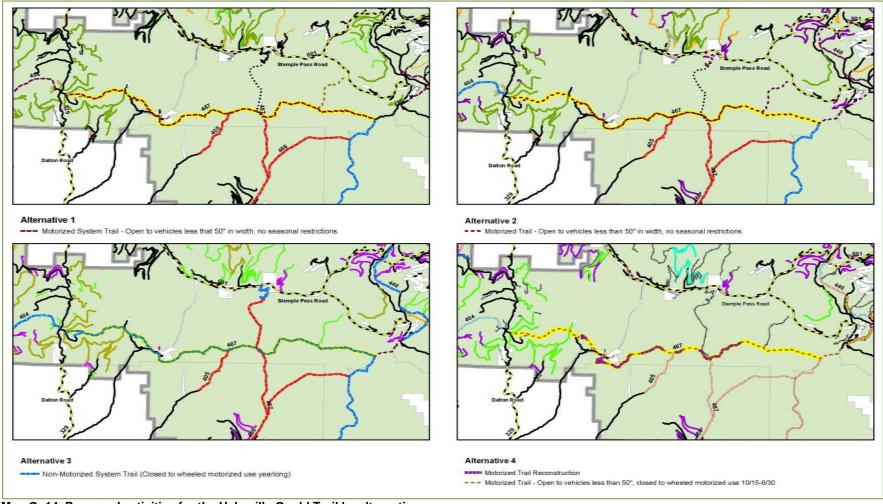
Map G- 12. CDNST Proposed activities for Stemple Pass to planning area boundary by alternative

## The Stonewall Mountain Trail by Alternative



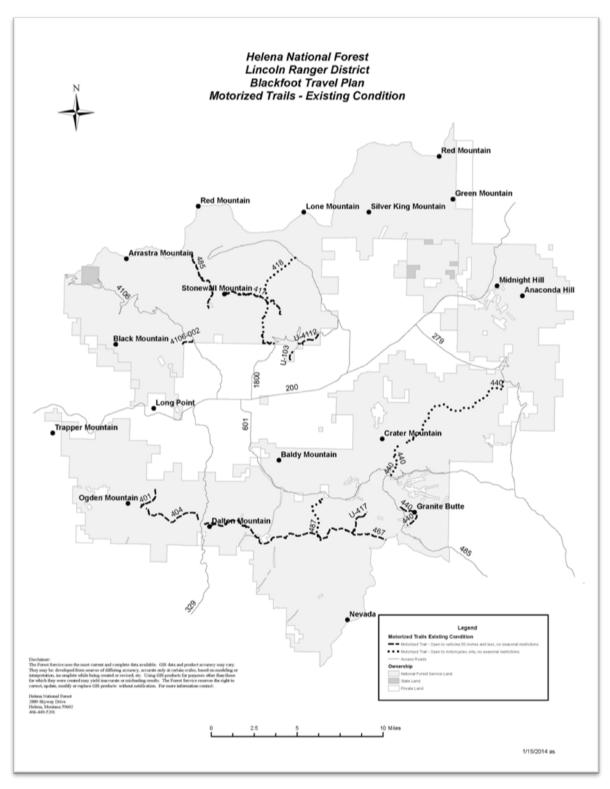
Map G- 13. Proposed activities for the Stonewall Mountain Trail by alternative

## The Helmville Gould Trail by Alternative

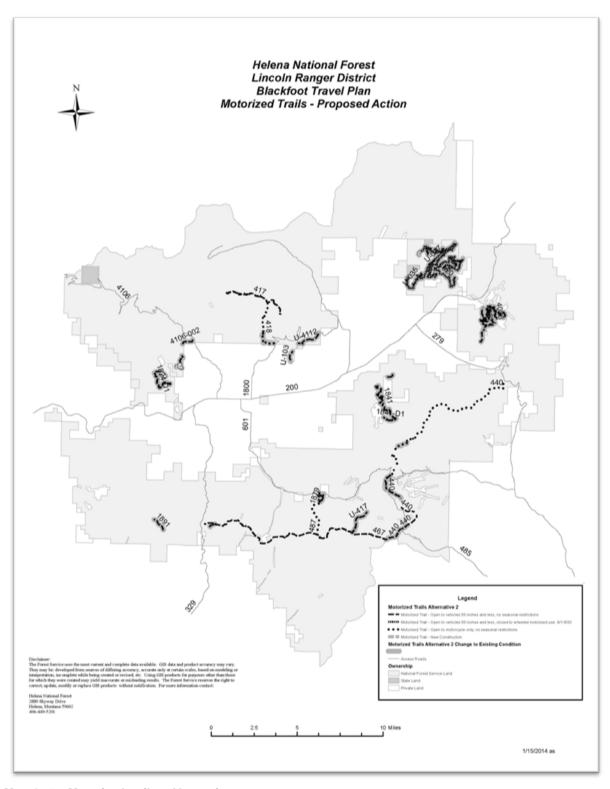


Map G- 14. Proposed activities for the Helmville Gould Trail by alternative

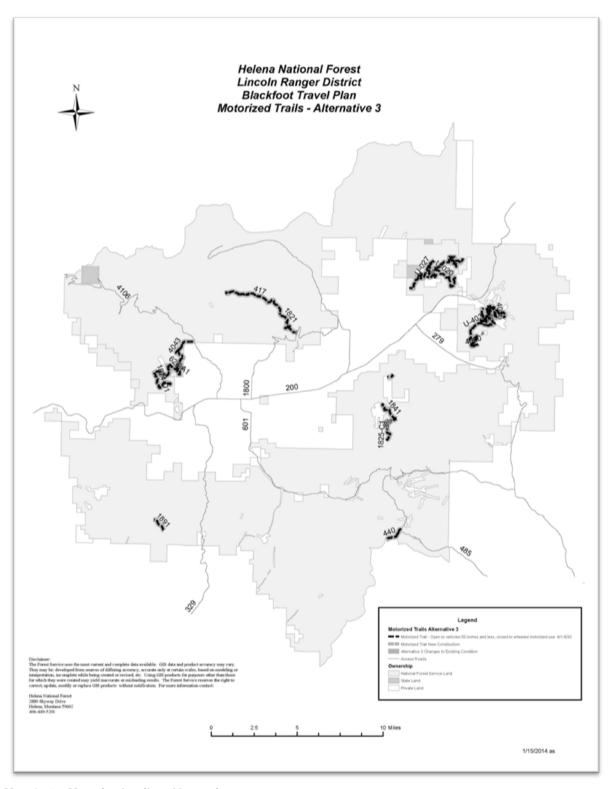
## Motorized Trails by Alternative



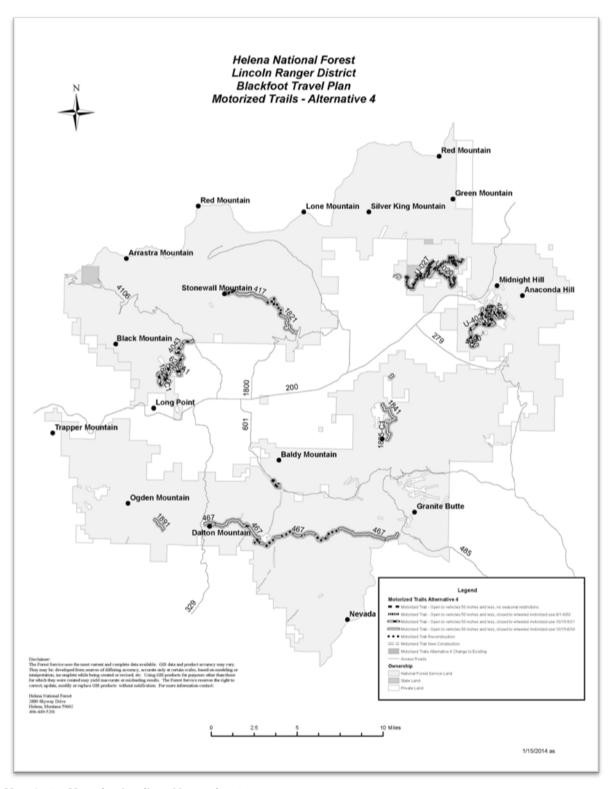
Map G- 15. Motorized trails – Alternative 1-existing condition



Map G- 16. Motorized trails - Alternative 2

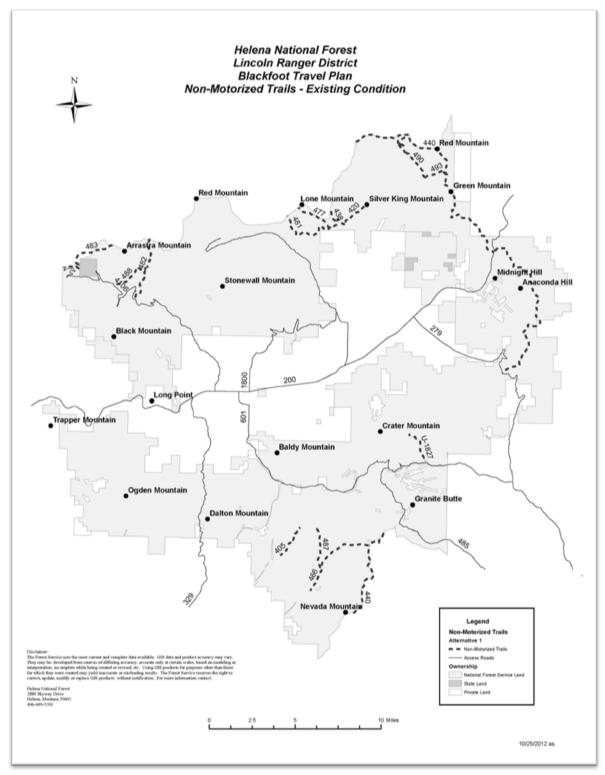


Map G- 17. Motorized trails - Alternative 3

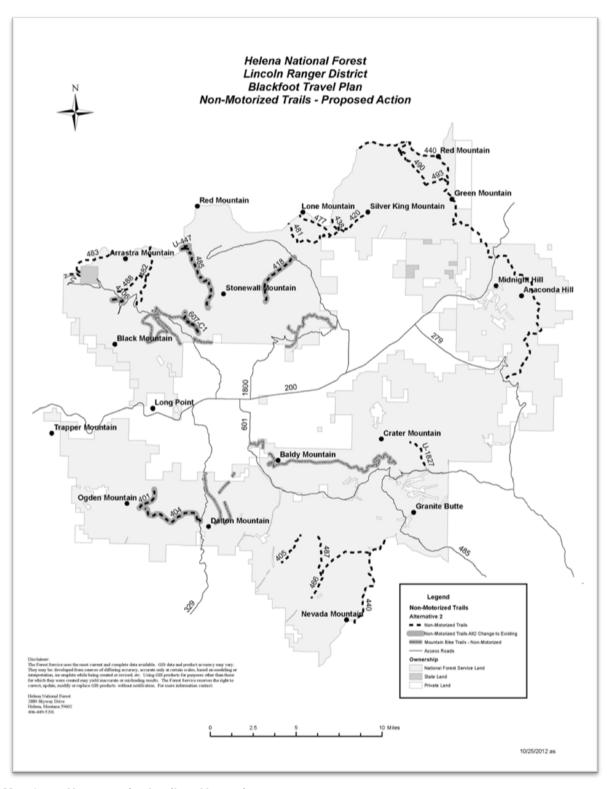


Map G- 18. Motorized trails - Alternative 4

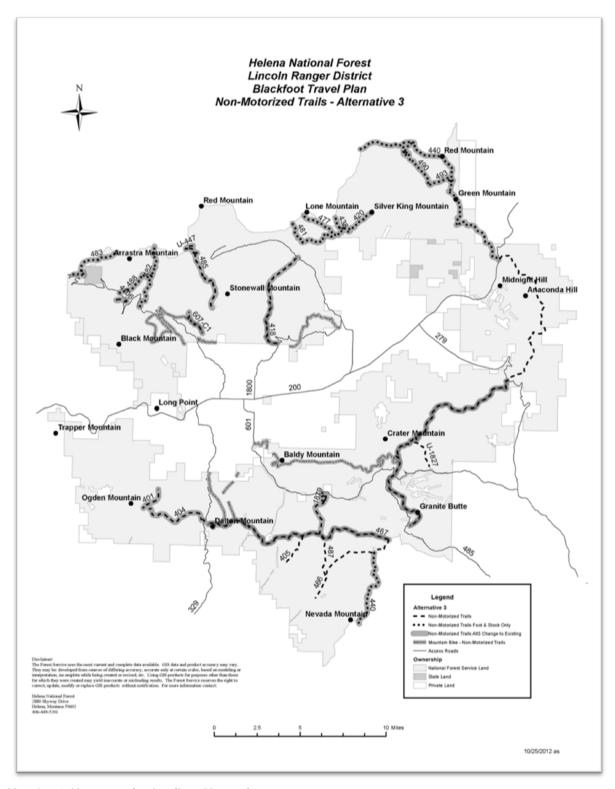
## Non-Motorized Trails by Alternative



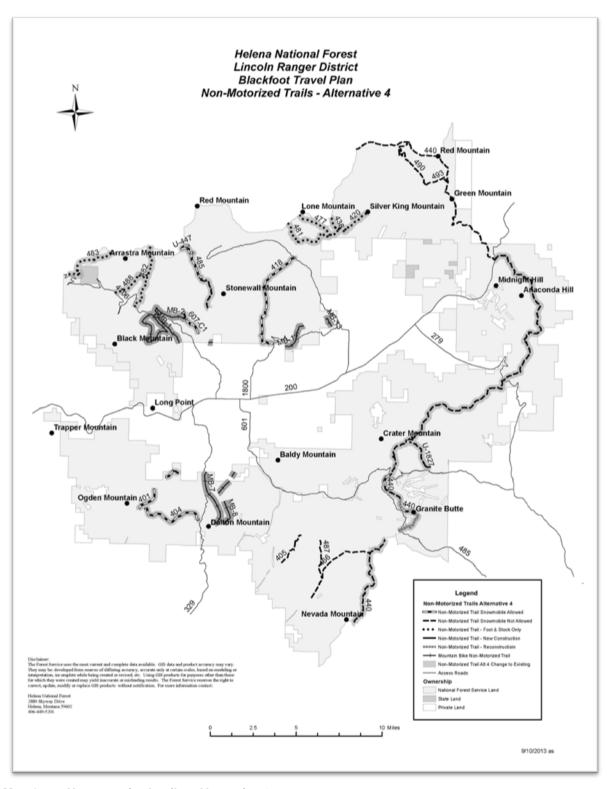
Map G- 19. Non-motorized trails – Alternative 1-existing condition



Map G- 20. Non-motorized trails - Alternative 2

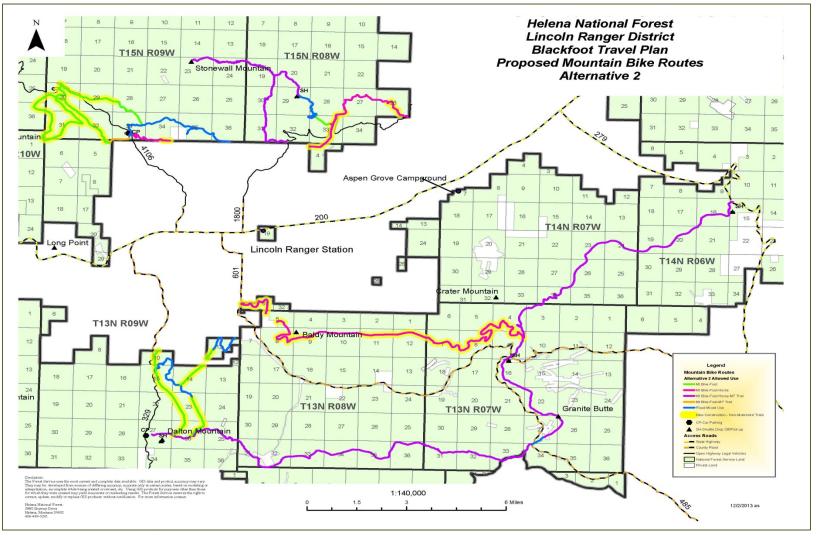


Map G- 21. Non-motorized trails - Alternative 3

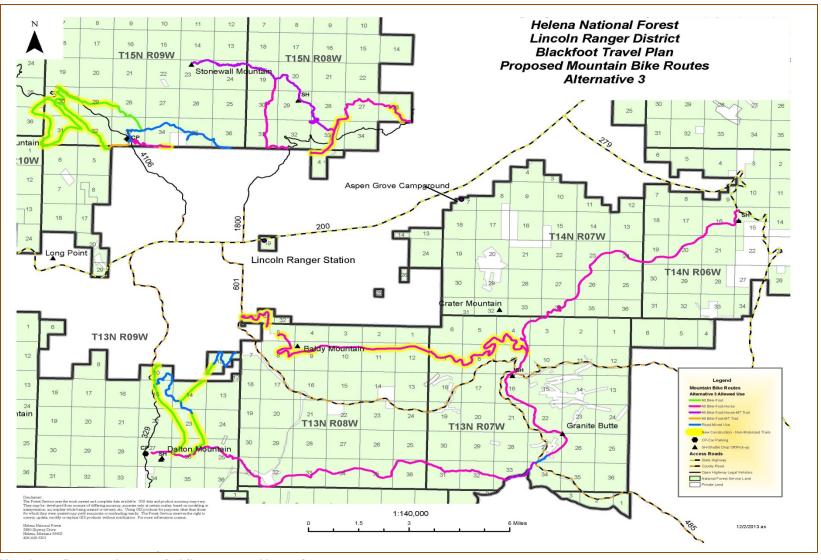


Map G- 22. Non-motorized trails - Alternative 4

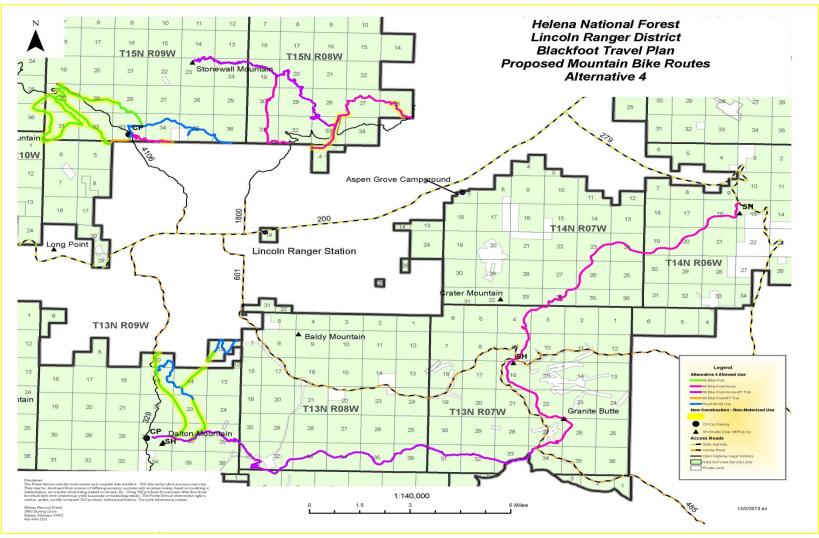
## Proposed Mountain Bike Routes by Action Alternative



Map G- 23. Proposed mountain bike routes - Alternative 2



Map G- 24. Proposed mountain bike routes – Alternative 3



Map G- 25. Proposed mountain bike routes - Alternative 4



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## **Appendix H – Best Management Practices**

The tables displaying Best Management Practices in the Draft EIS were removed for the Final EIS.

## Appendix I – Programmatic Forest Plan Amendment to R1 & N1 Management Area Direction

#### **Background Information**

The Helena Forest Plan guides all natural resource management activities and establishes management standards for the Helena National Forest. It describes resource management practices, levels of resource production and management, and availability and suitability of lands for resource management.

National Forest System land within the Helena National Forest is divided into 23 management areas each with different management goals, resource potentials, and limitations. Thirteen of these (A1, L1, L2, M1, N1, R1, T1, T2, T3, T4, T5, W1, and W2) occur within the Blackfoot travel planning area. Proposed actions under each of three action alternatives considered in detail for this travel plan (see chapter 2) are consistent with management direction for each of these areas with two exceptions: Management Area N1- Granite Butte Proposed Research Natural Area, and Management Area R1-Nevada Mountain (figure i- 1). For this reason, we are proposing a programmatic amendment to the Forest Plan as part of this travel plan, as follows:

- N1 If alternative 2 is selected for implementation, we would change the wording in the Forest Plan for Management Area N1 in order to allow management of a specific motorized trail within the Granite Butte Proposed Natural Resource Area. If either alternative 3 or 4 is selected for implementation, we would change the wording in the Forest Plan in order to allow management of a non-motorized trail within this area.
- R1 If either alternative 2 or alternative 4 is selected for implementation, we would change the wording in the Forest Plan for Management Area R1 in order to allow management of a specific motorized trail within the Nevada Mountain area.

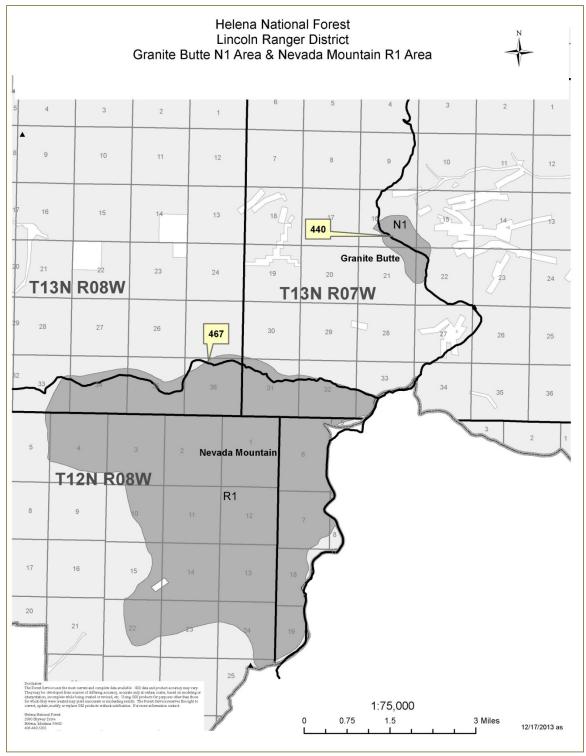


Figure I- 1. Locations of Management Areas N1 and R1 in the Lincoln Ranger District

# Management Area N1, Granite Butte proposed Research Natural Area (Forest Plan page III-8)

Management Area N1 includes all proposed research natural areas (pRNAs). The goals of pRNAs are to provide areas for research, observation, and study of undisturbed ecosystems which typify important forest, shrubland, grassland, alpine, aquatic, and geologic types on the Helena National Forest.

The Granite Butte pRNA occurs in the Blackfoot travel planning area. It is 500 acres in size and is an ecosystem proposed for research because of the presence of a rare forest/plant community including subalpine fir, whitebark pine, beargrass, grouse whortleberry, rough fescue, bluebunch wheatgrass, and Idaho fescue.

As shown on page III-9 of the Forest Plan, specific direction for recreation in this Management Area includes:

- Developed recreation facilities will not be allowed.
- ♦ Dispersed recreation facilities such as trails or trailhead developments will not be allowed

Trail #440, the Continental Divide National Scenic Trail, occurs within this management area and has since at least 1977, before the Forest Plan was approved. It is currently managed as a motorized trail and has been since 1977, as described in more detail below.

Under any of the three action alternatives considered in detail for this travel plan, the section of trail #440 that is within Management Area N1 is proposed to continue to be managed as a recreation trail; under alternative 2, motorized use of this section of trail would continue and under alternatives 3 and 4 this section of trail is proposed for non-motorized use.

The Record of Decision for the Helena National Forest Plan was signed by Regional Forester Overbay on May 28, 1986. The map of record that accompanied the decision clearly shows Trail 440 going through the N1 management area. Travel plan maps in the project file include this portion of trail #440 as motorized from 1977 to the 2006 map used and sold to the public. A mapping error of this trail in the newest map sold to the public is why this is shown as a non-motorized trail.

It is clear the Helena National Forest knew this trail was in existence prior to the designation of the N1 management area. It is not known why this was not noted in the record of decision.

A programmatic plan amendment to Management Area N1 is needed if any of the three action alternatives are selected for implementation, in order to continue managing this portion of the Continental Divide National Scenic Trail #440.

During development of this travel plan and consideration of alternatives to the proposed action, we conducted several site visits in partnership with the Montana Wilderness Association to determine if this portion of the trail could be relocated outside of Management Area N1. We concluded that rerouting the trail would not be feasible due to the proximity of scree slopes and difficult terrain and the presence of roads flanking the boundary.

## Management Area R1, Nevada Mountain (Forest Plan, pages III-24 – III-26)

Management Area R1 consists of "large blocks, greater than 3,000 acres, of undeveloped land suited for dispersed recreation.....These areas provide opportunities for semi-primitive non-motorized recreation and are characterized predominately by natural or natural appearing environment where there is a high probability for isolation from man's activities." Management goals listed in the Forest Plan for this management area include providing for the maintenance and/or enhancement of fishery, big game, and nongame habitat, grazing allotments, visual quality, and water quality.

As shown on page III-24 of the Forest Plan, specific direction for recreation in this management area includes:

♦ Motorized vehicles are not allowed in the management area. Exceptions may be allowed on a case-by case-basis where motorized vehicles are needed for legitimate mineral use

Trail #467 occurs along the boundary of this Management Area and both alternatives 2 and 4 would continue to manage this trail for motorized use within this area.

Page 9 of the Record of Decision for the Helena National Forest Plan signed by Regional Forester Overbay on 5/28/1986 in reference to the Nevada Mountain Roadless Area states, "I am not recommending this area for wilderness. I believe other resources, such as locatable and leasable minerals, wildlife habitat, motorized and non-motorized recreation, and timber, have a greater value to the people than classified wilderness in this area. I believe the Forest can provide more recreation opportunities in this area without wilderness classification than it can with it."

In Appendix C of the Helena National Forest Plan FEIS (Nevada Mountain (1606) C/115) describes existing condition of the roadless area as, "Hunting is the most popular recreation. The Continental Divide trail runs north-south through the area, and old trails and jeep roads on the ridges provide additional recreation opportunities. Motorized vehicles use all the roads and trails." On page C/117, "Present recreation use of the area includes motorized and non-motorized use, mostly for hunting. Type of use is not expected to change if the area is not developed."

In the decision for alternative E-1 minimum development allowed for the Nevada Mountain Roadless Area (page C/125), "Recreation activities would continue to be dominated by hunting and would occur in both roaded and unroaded settings...". However, the map for the decision clearly shows trail #467 as a road (for 1.5 miles in T13N, R7W Sections 31, 32, and 33) and trail within the R1 boundary (1986). The maps also include the Nevada Creek road #296 inside this R1 boundary as well as a 40 acre parcel of private land.

Given the above, there has been confusion as to the intent of the Forest Plan specific to allowing motorized use on Trail #467 or the mapping of the R1 north boundary. Trail #467 was not closed to motorized use per the signing of the Forest Plan decision in 1986.

On August 30, 1989, the Nevada Mountain R1 area was closed to all motorized use through a special order signed by Forest Supervisor Nunn. However seven months later, this order was rescinded (March 22, 1990) by Forest Supervisor Nunn. This was followed by another special order that redefined the area where motorized vehicles are prohibited which was signed on 11/26/1990 by Forest Supervisor Nunn. This order describes this area (Exhibit A map) as

"...paralleling the south side of trail #467..." This order was supported by a decision memo signed by District Ranger Thomas J. Liebscher on 10/9/1990 that stated the same thing. Once again, on 6/1/1991 another order was signed by Forest Supervisor Nunn that again states that #467 is open yearlong to motorized vehicles however defines this as vehicles 48" or less in width. All of the above referenced documents are located in the project record.

There was no Forest Plan Amendment to either allow trail #467 as motorized inside this R1 boundary or an amendment to change the R1 boundary to "parallel the south side of trail #467".

What is clear is motorized use was allowed on #467 prior to the Forest Plan and was allowed to continue after the Forest Plan. Travel plan maps in the project file include trail #467 as motorized from 1977 to the current map used and sold to the public today.

Motorized use in this area does not conflict with the 2001 Roadless Rule (Fed. Reg. 3244, (Jan. 12, 2001)) as the Federal Register states, "Nothing in the [the rule] as proposed was intended to prohibit the authorized construction, reconstruction, or maintenance of motorized or non-motorized trails that are classified and managed as trails pursuant to existing statutory and regulatory authority and agency direction" (Federal Register 3244, 3251).

A programmatic plan amendment to Management Area R1 would make the plan and this existing use congruent if either alternative 2 or alternative 4 is selected for implementation.

#### **Proposal**

This amendment for the Blackfoot Travel Plan would amend the following portions of the Helena National Forest Plan specific to the particular geographic areas identified below within the R1 and N1 management areas. This proposal incorporates the language below into the HNF Plan, depending on which alternative is ultimately selected for implementation and documented in the Record of Decision.

#### Management Area N1 under Alternative 2:

If alternative 2 is selected for implementation, we propose to modify the following language currently in the forest plan for Management Area N1. All other forest plan text and direction would not be changed.

Helena Forest Plan, Chapter III, Management Area N1 - Granite Butte proposed Research Natural Area, page III-9, under the "Recreation" heading:

#### Recreation

 Dispersed recreation facilities such as trails or trailhead developments will not be allowed, with one exception: the portion of the Continental Divide National Scenic Trail #440 will be managed as a motorized trail in T13N, R7W, Sections 15, 16, 21, and 22. No off-route wheeled motorized vehicle use will be permitted.

#### Management Area N1 under either Alternative 3 or 4:

Helena Forest Plan, Chapter III, Management Area N1 - Granite Butte proposed Research Natural Area, page III-9:

#### Recreation

• Dispersed recreation facilities such as trails or trailhead developments will not be allowed, with one exception: the portion of the Continental Divide National Scenic Trail #440 will be managed as a non-motorized trail in T13N, R7W, Sections 15, 16, 21, and 22.

#### Management Area R1 under either Alternative 2 or 4:

Helena Forest Plan, Chapter III, Management Area R1 – Nevada Mountain, paragraph 2 on page III-24:

#### Recreation

Motorized vehicles are not allowed in the management area. Exceptions may be allowed on a case-by case-basis where motorized vehicles are needed for legitimate mineral use. In addition, motorized use for wheeled vehicles 50 inches in width or less on the portion of Trail #467 beginning in T13N, R7W, Section 33 and ending in T13N, R8W Section 33 will be allowed from July 1 through October 14. No off-route wheeled motorized vehicle use will be permitted.

### Findings Required by Laws, Regulations, and Policies

#### **National Environmental Policy Act**

The direct, indirect and cumulative effects of applying this amendment were analyzed by resource under the travel management alternatives. For example, effects of continued use on Continental Divide National Scenic Trail #440 in Management Area N1 were analyzed, by resource, in all alternatives. Under alternatives 1 and 2, this segment of trail was analyzed for motorized use, and under alternatives 3 and 4, effects of non-motorized use were evaluated.

Similarly, effects of continued motorized use on portions of Trail #467 in Management Area R1 in the Nevada Mountain Roadless Area, was analyzed, by resource, in alternatives 2 and 4.

#### Findings Required by Law, Regulation and Policy

#### National Forest Management Act

The National Forest Management Act (NFMA) provides that forest plans may be amended in any manner, but if the management direction results in a significant change in the plan, additional procedures must be followed.

In April 2012, the Forest Service adopted new planning regulations at 36 CFR 219, Subpart A and Subpart B, which replaced the final 2000 land management planning rule (2000 rule) as reinstated in the Code of Federal Regulations on December 18, 2009 (74 FR 67062). The 2012 rule includes a transition period during which plan amendments may be initiated under the provisions of the prior planning regulation for 3 years after May 9, 2012 and may be completed and approved under those provisions. This amendment is being completed under the requirements of the 1982 regulations. It is, however, subject to the objection process in 36 CFR 219 Subpart B (at 219.59(b)).

The 1982 regulations at 219.10(f) require the agency to determine whether or not a proposed amendment would result in a significant change in the plan. If the change resulting from the proposed amendment is determined to be significant, the same procedure as that required for development and approval of a plan shall be followed. If the change resulting from the

amendment is determined not to be significant for the purposes of the planning process, then the agency may implement the amendment following appropriate public notification and completion of the NEPA procedures. Forest Service Manual section 1926.51 identifies factors to consider in determining whether an amendment is significant or non-significant for those plans using planning regulations in place before November 9, 2000.

These factors were considered and will be fully documented and discussed in the Record of Decision.

Consideration of impacts of this amendment on other laws and regulations is described at the end of FEIS chapter 3 and will also be fully documented and discussed in the Record of Decision.

# Appendix J – Forest Service Response to Public Comments on the Draft Environmental Impact Statement

#### Introduction

We received approximately 16,990 responses during the 45-day and 90-day public comment periods for the Blackfoot Travel Plan Draft Environmental Impact Statement (USDA Forest Service 2013) and the associated Big Game Security Forest Plan Amendment; approximately 16,435 commenters submitted an identical form letter that originated with The Wilderness Society. Approximately 555 commenters either submitted other form letters, substantive additions to identified form letters, original comments or comments that were not substantive. All of the substantive comments received were analyzed in detail; we identified 295 letters with substantive comments (some associated with multiple senders). We coded and categorized all of the comments in these letters. This appendix includes a summary of all comments received and the Forest Service response. Table J- 1 lists the commenters by individual letter number or form letter; Error! Reference source not found. lists the public comment statements and the Forest Service response. The public comment statements in table j- 2 were derived from analyzing all of the individual concerns/comments from each letter and then summarizing them. To see the comments from individual letters that were used to develop the public comment statements (PCS) in table j- 2, look for the letter number in parenthesis after the PCS, which corresponds to the letter number shown in table j- 1. The first number is the letter number and the number shown after the decimal point refers to the individual comments within that letter. For those individuals who submitted comments that were categorized as a form letter, look for the letter number associated with each form letter in table j-1.

#### **Updated Public Comment Analysis**

Approximately 40 public and agency comment letters received during the Blackfoot Travel Plan Draft Environmental Impact Statement (DEIS) and Big Game Security Forest Plan Amendment comment periods were inadvertently not entered into the content analysis database developed during the March – June 2013 public comment content analysis phase for this project. We discovered this oversight after the Final Environmental Impact Statement (FEIS) and both draft Records of Decision (RODs) were released for their objection periods in March 2014. While we did receive, read and consider each of these comment letters (shown in table j- 3 below) as they came in to the district office or to the comment inbox, they did not get entered into the project record at that time and were not reflected in FEIS Appendix J table j- 2. Table J- 3 includes a detailed response to each of these letters that ensures all concerns are acknowledged and addressed in the FEIS prior to signing the final RODs.

#### How to Use Table J-3

All of the individual comments/concerns contained within each of the approximately 40 letters displayed in table j- 3 were compared against comment letters already received and included in the content analysis database. If the letter contained the same content as a previously coded letter in the database, column 1 and 2 reflect that. If the letter was unique, it was given a new letter number or form letter number (shown in column 1).

Three hundred eighty-five (385) Public Comment Statements (PCS) were developed during the March – June 2013 public comment analysis phase of this project and are described in FEIS appendix J (Table J- 2- Response to Comments) and also in the Public Comment Content Analysis Report available in the project record (document name: 130520\_BkfAllComments). We compared these 385 previously developed public comment statements to the comments contained in each of these approximately 40 letters. If the comment/concern in a letter was reflected in one or more PCS, we listed the PCS number in column 4. Each of the individual letters were reviewed and entered into a folder in the project record containing all coded comment letters. Each reviewed and coded letter in the record indicates the letter number or form letter it is associated with and the corresponding PCS number. If the individual comments within the letter corresponded to an existing PCS, this was noted on the coded letter in the record and in table j- 3, column 4. If individual comments within a letter did not clearly correspond to one of the existing 385 PCS, these individual comments from the letter were copied into table j- 3 (column 3) and responded to individually (column 5).

#### List of Commenters Table

Table J- 1. List of commenters on the Blackfoot Travel Plan DEIS

Letter Number	Name		Organization
1	Robert	Zuelke	
2	Bill	Bahny	
3	Adam	Confair	
4	Alex	Patten	
5	Dan	Bedore	
6	David	Thibault	
7	Doug	Carlson	
8	Kyle	Isakson	
9	Sally	Thompson	
10	Will	Hiltz	
11	Mark	Baum	
12	Anna	Mathys	
13	Charles	Murphy	
14	Randall	Knowles	
15	Jeff	Wuerl	
16	Steve	Wadsworth	
17	Kathy	Hundley	
18	Sara	Johnson	Native Ecosystems Council
19	Marc	Parriman	
20	Taylor	Orr	
21			Native Ecosystems Council & Alliance For The Wild Rockies
22			Capital Trail Vehicle Association
23	Mary	Fay	
24	Michael	Mckay	

Letter Number	N	lame	Organization
25	Dylan	Desrosier	
26	Sherrill	Halbe	
27	Charlene	Miller	
28	George	Alderson	
29	David	Stagliano	
30	Donna	Murphrey	
31	Jeffrey	Kreidler	
32	Mac	Smith	
33	Stephen	Walsh	
34	Michael	Beaty	
35	Gayle	Joslin	
36	Nikki	Mcelligott	
37	Josh	Hicks	
38	Robert	Handelsman	
39	Rhian	Gold	
40	David	Webb	
41 Form letter 2	С	Brumleve	The Wilderness Society
	ery 16,432 inaivial	ials on behalf of The	Wilderness Society (not listed here, but
	the project record	l) plus the following	Wilderness Society (not listed here, but individuals:
	the project record Brandon	l) plus the following Bean	
	the project record	l) plus the following	
	the project record  Brandon  Colleen	Bean Bonin	
	Brandon Colleen John	Bean Bonin Crevelli	
	Brandon Colleen John Cal	Bean Bonin Crevelli Cumin	
	Brandon Colleen John Cal Dorrie	Bean Bonin Crevelli Cumin Ferrell Lish	
	Brandon Colleen John Cal Dorrie Chris	Bean Bonin Crevelli Cumin Ferrell	
	Brandon Colleen John Cal Dorrie Chris Donald	Bean Bonin Crevelli Cumin Ferrell Lish Mcgowan	
	Brandon Colleen John Cal Dorrie Chris Donald Carlene	Bean Bonin Crevelli Cumin Ferrell Lish Mcgowan Petty	
	Brandon Colleen John Cal Dorrie Chris Donald Carlene Todd	Bean Bonin Crevelli Cumin Ferrell Lish Mcgowan Petty Savelle	
available in t	Brandon Colleen John Cal Dorrie Chris Donald Carlene Todd C	Bean Bonin Crevelli Cumin Ferrell Lish Mcgowan Petty Savelle Smith	
available in t	Brandon Colleen John Cal Dorrie Chris Donald Carlene Todd C Seth	Bean Bonin Crevelli Cumin Ferrell Lish Mcgowan Petty Savelle Smith O'connell	
42 43	Brandon Colleen John Cal Dorrie Chris Donald Carlene Todd C Seth Doug	Bean Bonin Crevelli Cumin Ferrell Lish Mcgowan Petty Savelle Smith O'connell Kikkert	
42 43 44	Brandon Colleen John Cal Dorrie Chris Donald Carlene Todd C Seth Doug Michael	Bean Bonin Crevelli Cumin Ferrell Lish Mcgowan Petty Savelle Smith O'connell Kikkert Brown	
42 43 44 45	Brandon Colleen John Cal Dorrie Chris Donald Carlene Todd C Seth Doug Michael Tyson	Bean Bonin Crevelli Cumin Ferrell Lish Mcgowan Petty Savelle Smith O'connell Kikkert Brown	individuals:
42 43 44 45 46	Brandon Colleen John Cal Dorrie Chris Donald Carlene Todd C Seth Doug Michael Tyson Greg	Bean Bonin Crevelli Cumin Ferrell Lish Mcgowan Petty Savelle Smith O'connell Kikkert Brown O'connell Munther	individuals:
42 43 44 45 46 47	Brandon Colleen John Cal Dorrie Chris Donald Carlene Todd C Seth Doug Michael Tyson Greg Wendy	Bean Bonin Crevelli Cumin Ferrell Lish Mcgowan Petty Savelle Smith O'connell Kikkert Brown O'connell Munther Wheeler	individuals:
42 43 44 45 46 47 48	Brandon Colleen John Cal Dorrie Chris Donald Carlene Todd C Seth Doug Michael Tyson Greg Wendy Mary Alice	Bean Bonin Crevelli Cumin Ferrell Lish Mcgowan Petty Savelle Smith O'connell Kikkert Brown O'connell Munther Wheeler Chester	individuals:

Letter Number	N	lame	Organization
52	Seth	O'connell	
53	Seth	O'connell	
54			Last Chance Back Country Horsemen
55	Randall	Reynolds	
56	Bill	Hallinan	
57	Jenny	Sika	
58	Gary	Ingman	Helena Hunters And Anglers Association
59	David	Rusoff	
60	Connie	Cole	
61 Form Letter 1	Krys	Bagwell	
The content following inc		ategorized as Form L	etter 1 and was also received from the
	Carolyn	Abbott	
	Bob	Adams	
	Gary	Aitken	
	George and Frances	Alderson	
	David	Amnotte	
	David	Amnotte	
	John	Anthony	
	Elser	Arnold	
	Lester	Ashwood	
	Lou	Bahin	
	Teri and Dave	Ball	
	Jack	Ballard	
	Guy Dean	Bateman	
	Diane	Bayuk	
	Mike and Stephanie	Becker	
	Norman	Bishop	
	Norman	Bishop	
	Paul	Blumenthal	
	Lee	Boman	
	Collette	Brooks-Hops	
	Kim and Lew	Brown	
	Raymond	Brown	
	Sara	Buley	
	Virginia	Burris	
	Pamela	Buxton	
	Sally	Cameron-Russell	
	Arnold	Case	

Letter Number	Na	me	Organization
	Duane	Claypool	
	Dave	Colavito	
	Linda and Del	Coolidge	
	Terry	Copenhaver	
	Darik	Corzine	
	Diana	Corzine	
	Ginny	Cowan	
	Temple	Daigle	
	Dan and Donna	Deutsch	
	Jerry	Dimarco	
	Maury	Dornberg	
	Mary	Douglass	
	Stephanie	Draper	
	Candice	Durran	
	Len and Concetta	Eckel	
	Helen	Edwards	
	Sandra	Elliot	
	Steve	Ellis	
	Michael	Enk	
	Jeannie	Fairfax	
	Mark	Faroni	
	Mary	Fay	
	Mary	Fay	
	Doug	Ferrell	
	Mindy	Ferrell	
	Pete	Ferrell	
	Pete	Ferrell	
	Doris	Fischer	
	Kit	Fischer	
	Bill	Fitzgerald	
	Dick	Forehand	
	Dick	Forehand	
	Andrew	Franks	
	Lydia	Garvey	
	Anton	Giger	
	Alan and Debby	Gill	
	Carlin	Good	
	Gayle	Gregovich	
	Joe	Gutkirski	
	Sherrill	Halbe	

Letter Number	Name		Organization
	Auldeen	Hall	
	Krisy	Hammond	
	Mike	Hankins	
	Todd	Harwell	
	Charles	Hasskamp	
	Wayne	Hoffman	
	Robert	Hopkins	
	Charles	Houck	
	Charles	Janzen	
	Gerry	Jennings	
	Marie	Johns	
	Mary	Johnson	
	Gil	Jordan	
	Ruby and Doug	Kikkert	
	Steve	Koetzel	
	Ivan and Pat	Kralik	
	Jim and Marion	Kraus	
	Paul	Lamberger	
	John	Larson	
	Henry	Lischer	
	Dean	Littlepage	
	Heather	Lucero	
	Jim and Marion	Manley	
	Drew	Martin	
	William	Mclaughlin	
	Pat	Mcleod	
	Charlene	Miller	
	Charles	Miller	
	Molly	Montana	
	Terry	Moran	
	David	Niven	
	Judy and Fred	Opperman	
	Paul	Pacini	
	Shirley	Palmer	
	Steve	Paulson	
	Mike	Pasztor	
	Caroline	Perkins	
	Scott	Piddington	
	Steve	Platt	
	Sanna	Porte	
	Sandra	Rachlis	

Letter Number	N	ame	Organization
	Kerry	Reif	
	D. And R.	Rockafellow	
	David	Rockwell	
	David	Rockwell	
	Becky	Sanders	
	Byril	Sanders	
	Eileen	Schreonemann	
	Paul	Schutt	
	John	Seidl	
	Patricia	Sharp	
	Richard	Smith	
	Greg	Speer	
	Bruce	Spring	
	Pamela	Spring	
	Judy	Staigmiller	
	Richard	Stanley	
	David	Steinmuller	
	David	Steinmuller	
	Loretta	Stiffler	
	Gail	Storey	
	Porter	Storey	
	Porter	Storey	
	Diana	Talcott	
	Janet	Tatz	
	Kay	Trebesch	
	Stephen	Wallace	
	Julie	Waters-Barcomb	
	Patty Jo	Watson	
	David	Webb	
	Kathryn	Wehrly	
	Bob	Weisenbach	
	O. Alan	Weltzien	
	O. Alan	Weltzien	
	Gordon and Janet	Whirry	
	Glynn	Wolar	
	Glynn	Wolar	
	John	Woolley	
	Shirley	Bollinger	
	Jaakko	Puisto	

Letter Number	1	Name	Organization
	Unread	lable Name	
62	Carlene	Petty	
63	Bob	O'connell	
64	Kory	Kennaugh	
65	Rodney	Fisher	
66	Randall	Knowles	Russell Country Sportsmen's Association
67	Marianne	Spitzform	
68	Gary	Burnett	Lincoln Restoration Committee
69	Robert	Stewart	United States Department of Interior
70	Mona	Ehnes	
71	Bill	Hallinan	
72	Peter	Odegard	
73	Amber	Kamps	
74	Teddy	Roe	
75	Doug	Mccombs	
76	James	Gosink	
77	Tiffany	Shotnokoff	
78	Kathryn	Ore	Montana Historical Society
79	Randy	Shotnokoff	
80	Belle	Richards	
81	Sally	Lyndon	
82	Matthew	Davis	
83	Paul	Lamberger	
84	Scott	Brennan	Southwestern Crown Collaborative
85	Trudy	Nelson	
86	Barbara	Meek	
87	Brian	Felstet	
88	Richard	Ostheimer	
89	Bert	Lindler	
90	Joseph	Martinez	
91	Dennis	Bordeleau	
92	Ken	Shanholtz	
93	Roy	O'connor	
94	Arlo	Skari	
95	Brian	Crocker	
96	Tim	Hawke	
97	Brandi	Harding	
98			Montana High Divide Trails Partnership
99	Curt	Tweedy	Innerroads Wilderness Programs
100	Joe	Erickson	
101	Kenneth	Zahn	

Letter Number	Name		Organization
102	Erich	Weber	
103	Tammy	Nader	
104	James	Volberding	Atna Resources Ltd
105	Kimberly	Rowlett	The Wilderness Society
106	Carrie	Palmer	
107	Al	Luebeck	
108	David	Omen	
109	Terry	Peetz	
110	Jerry	Davis	
111	Deborah	Kimball	
112	Bill	Burkland	
113	Travis	Bennett	
114	James	Wolf	Continental Divide Trail Society
115			Montana Mountain Bike Alliance
116	George	Kamps	
117	Brian	Robbins	
118	Peter	Schendel	
119	William	Parriman	
120 Form Letter 3	Kelsey	O'connell	
The content following inc		categorized as Form	Letter 3 and was also received from the
	Michael	Berry	
	Matt	Diediker	
	Nate	Eitzmann	
	Riki	Emerson	
	Eric	Hein	
	Dennis	Miller	
	Colleen	Nichols	
	Debbie	O'connell Peterson	
	Tyson	Radley-Oconnell	
	Brad and Danielle	Sanders	
121	Jennifer	Kennaugh	
122	Barbara	Geller	
123	Mary	O'brien	
124	Ashton	Loomis	
125	Andy	Skinner	
126	Jeff	Shryer	
127	Pamela	Kloote	
128	Jennifer	Loomis	
129	Dede	Taylor	

Letter Number	N	lame	Organization
130	Robert	Sims	
131	Arnold	Lelis	
132			International Mountain Bicycling Association
133	Michael	Ford	
134	Joe	Nemes	
135	Alan	Elliot	
136	Iris	Basta	
137	Montana	Region 8	Environmental Protection Agency
138	Sanna	Porte	
139	Alex	Russell	
140	Bob	Bushnell	
141	Steve	Moore	
142	Jesse	Feathers	
143	Daniel	Harper	
144	Ashley	Koch	
145	Mary	Carparelli	
146	Casey	Hackathorn	Hellgate Hunters And Anglers
147	Dick	Thweatt	
148	Darrell	Holmquist	
149	Paul	Turley	
150	Brent	Anderson	
151	Greg	Bahny	
152		·	Lincoln Restoration Committee
153	Ellie	Parker	
154	Greg	Bahny	
155	David	Brennan	
156	Charlie	Hester	
157	Chris	Froines	
158	Charlie	Hester	
159	Ruth	Makin	
160	Margery	Leffingwell	
161	, .		
Form Letter 4	Maureen	Dahl	
The content following in		categorized as Form	Letter 4 and was also received from the
	John	Alastra	
	Heidi	Annau	
	Mark	Barnes	
	Theron	Burch	
	Mary	Church	

Letter Number	Name		Organization
	Michael	Covert	
	Stephanie	Covert	
	Thomas	Covert	
	Donna	Forkan	
	Ken	Jacobson	
	Mark	Klemencic	
	David	Koch	
	Jody	Loomis	
	Gregg	Marlenee	
	Heide	Marlenee	
	Tim	Metcalfe	
	Candice	Miller	
	Dennis	Miller	
	Patti	Miller	
	Mike	Pasichnyk	
	Brian	Patzer	
	Debbie	Patzer	
	Kelley	Patzer	
	Kevin	Patzer	
	Alan	Peterson	
	Justin	Roberts	
	David	Sedlock	
	Jonathan	Smith	
	Bradley	Stephenson	
	James	Super	
	Danial	Thares	
	Paul	Thompson	
	Bruce	Turner	
	Kat	Waterman	
	Lisa	Waterman	
	Rick	Wock	
162	Jerry	Grebenc	
163	Ryan	Chapin	
164	Bert	Beattie	
165	Michael	Lebwohl	
166	John	Wooschie	
167	Michael	Garrity	Alliance Wild Rockies-Native Ecosystem Council-Mt Ecosystem Defense Council
168	Robert	Handelsman	
169	Bryan	Oswood	
170	Curt	Milledge	
171	Drew	Martin	

Letter Number	1	lame	Organization
172	Stan	Paulson	
173	Orville	Bach	
174	David	Amnotte	
175	Chuck	Stearns	
176	Anne	Lairmore	
177	John	Lambing	
178	Len	Kopec	
179	Cathy	Covert	
180	Dave	Covert	
181	Allen	Edwards	
182	Mike	Pasztor	
183	Joan	Bailey	
184	Bryan	Wyberg	
185	Diana	Corzine	
186	Todd	Waterman	
187	Eric	White	
188	Jerry	Cole	
189	Jim	Merifield	
190	Thomas	Kilmer	
191	Jody	Loomis	
192	Andy	Skinner	
193	Penny	Herbert	
194	Scott	Brown	
195	Mike	Garrity	Native Ecosystems Council/Alliance For The Wild Rockies
196	Ted	Cogswell lii	
197	Terry	Kennedy	
198	Kim	Bradley	
199	Joe	Gutkirski	Montana Rivers
200	Michael	Babock	
201	Arthur	Callan	
202	Wayne	Chamberlin	
203	Brenda	Koch	
204	Steven	Handl	
205	Patrick	Brennan	
206	Tim	Mckinley	
207	Mike	Hutchinson	
208	Hank	Hudson	
209	Les	Howard	
210	Brandon	Mckinley	
211	Tyson	Radley O'connell	
212	Duane	Cassidy	

Letter Number	N	lame	Organization
213	Dennis	Righetti	
214	Patricia	Dangand	
215	Jeannine	Wilson	
216	Rachel	Stansberry	
217	Edward	Sohl	
218	Anne	Anglim	
219	Liz	Rantz	
220	Connie	Geiger	
221	Richard	Lyon	
222	Steve	Gerdes	
223	Kevin	O'leary	
224	Tom	Kreissler	
225	Bob	Boland	
226	Ruby	Kikkert	
227	Josh	Hicks	The Wilderness Society
228	Debora	Brown	
229	Diane	Buroff	
230	Mark	Faroni	
231	Kit	Fischer	
232	Greg	Schatz	
233	Don	Gordon	
234	Cody	Brown	
235	Gayle	Joslin	
236	Jim	Horan	
237	Linda	Musser	
238	John	Streich	
239	Alan	Elliot	
240	Bruce	Farling	Montana Trout Unlimited
241	Barry	Brown	
242	Bob	Walker	Last Chance Riders Motorcycle Club
243	Kathy	Lloyd	
244	Gary	Aitken	
245	Doug	Abelin	
246	Randy	Williams	
247			Montana Fish Wildlife And Parks
248	Keith	Carparelli	
249	Pat	Tucker	
250	Mike	Penfold	
251	John	Sullivan	
252	Doug	Deaton	
253	Bruce	Granger	

Letter Number	١	lame	Organization
254	Stephen	Peters	
255	Patricia	Daugaard	
256	Ryan	Hanson	
257	Blair	Howze	
258	Tim	Byron	
259	Jack	Ballard	
260	Mary	Douglass	
261	Jd	Ellington	
262	Joelle	Selk	Montana Bowhunters Association
263	Mark	Davis	
264	Dwayne	Garner	
265	Mike	Sedlock	
266	Steve	Platt	
267	John	Hart	
268			Capital Trail Vehicle Association
269	Kim	Kelsey	
270	Frank	Rust	
271	Steven	Kloetzel	
272	Paul	Trey	
273	Len	Walch	
274	David	Hardy	
275	Lin	Dazh	
276	Sandra	Elliot	
277	Kim	Gordon	
278	Janna	Lundquist	
279	John	Larson	
280	Corey	Parriman	
281	Shane	O'connell	
282	John	Schieffelbein	
283	Teresa	Martinez	Continental Divide Trail Coalition
284	Stacy	Bragg	Citizens For Balanced Use
285	Ramona	Ehnes	Great Falls Trail Bike Riders Association
286	Ramona	Ehnes	Montana Trail Vehicle Riders Association
287	Michele	Crist	The Wilderness Society
288 Form Letter 5	Ricky	Gilchrist	
The content following inc		categorized as Form	Letter 5 and was also received from the
	Mike Joanne	Barsi	
	Toby	Benson	
	Thomas	Burns	

Letter Number	1	Name	Organization
	Patricia	Daugaard	
	Kevin / Donna	Forkan	
	David	Koch	
	David	Koch	
	Brenda	Koch	
	Kenneth	Kronsperger	
	Robert	Kunz	
	Brett	Molyneaux	
	Mike	Sedlock	
	Dave	Sedlock	
	Jonathon	Smith	
	Daniel	Thares	
	Donna	Forkan	
	Jennifer	Garber	
	Bradley	Garber	
	Leon	Lilletvedt	
	Jody	Loomis	
	Miles	Partin	
	Gary	Peterson	
	Patricia	Wirt	
289	Karla	Nelson	
290	Don	Gordon	Capital Trail Vehicle Association
291	Greg	Munther	Montana Backcountry Hunters and Anglers Backcountry Hunters and Anglers Montana Wildlife Federation
292	Mathew	Bishop	Western Environmental Law Center
	Stan	Frasier	
293	Gayle	Joslin	Helena Hunters and Anglers Association Clancy-Unionville Citizen's Task Force
	Kathy	Lloyd	
294	Casey	Hackethorn	Hellgate Hunters and Anglers
295	Jeff	Hagener	Montana Fish, Wildlife and Parks

## Response to Comments Table

Table J- 2. Public comment statements from the DEIS and Forest Service Responses

Subject	Public Comment Statements (PCS) and Forest Service Responses
Chapter 1-General	PCS 01: The Forest Service should correct the spelling error in S11 from Hamburg Creek to Humbug Creek. (73.38)
5.13p.15. 1 5 5.15.1	Response: Thank you for your comment. The correction will be made for the EIS
	PCS 02: The Forest Service should clarify the statements made in the January 16, 2013 EIS notice regarding the use of the objections process in CFR 218. This is confusing because CFR 218 deals with hazardous tree removal and not travel planning. (235.22)
Chapter 1-General	Response: On March 27, 2013, the Forest Service issued regulations implementing the Project-Level Pre-decisional Administrative Review Process, also known as the objection process (36 CFR Part 218). Under this process eligible parties are able to seek higher-level review of unresolved concerns before the project decision has been signed, rather than appealing the decision after it has been made. This process is now available for all NEPA decisions documented by a Record of Decision (EIS) or a Memorandum Decision (EA). The 218 process is no longer limited to the Healthy Forests initiative and hazard tree projects.
	PCS 03: The Forest Service should clarify that the purpose and need for this action is to implement the Final OHV Rule, which should designate existing motorized routes for appropriate uses and create new motorized routes where needed. It should reflect the present high demand for motorized recreation in the planning area and recognize the positive impact these activities have on the forest. (22.35, 22.36)
Chapter 1-Purpose and Need	<b>Response:</b> The overall objective of this proposal is to provide a manageable system of designated public motorized access routes within the Blackfoot planning area, consistent with and to achieve the purposes of the Forest Plan and the travel management regulations at 36 CFR 212 subpart B, as described in chapter 1. The needs for taking action in order to achieve this objective are also described in chapter 1. How well each alternative would achieve each of the components of the purpose and need is described at the end of chapter 2. The range of alternatives analyzed in the EIS reflect a balance between provide motorize and non-motorized opportunities and resource protection and the analysis presented in chapter 3 recognizes both the positive and negative impacts changes to the route system would have.
Chapter 1-Public Involvement	PCS 04: The Forest Service should ensure that the public involvement with the NEPA process is equally represented by all groups from all sides of the issues. A lack of response through the NEPA process, to any particular issue, should not be interpreted as a lack of interest for that issue. Continue to provide clear and understandable information that meets the intent of NEPA. Ensure that the timing of requests for public input and comment coincide with a time that the public can access the planning area. Ensure that the public, including private landowners in the area, are adequately notified through meetings and fliers. Ensure that talking points and other public information items are clear and understandable. Sufficient information during scoping (such as detailed maps) should have been provided to gather all the appropriate input, particularly from

Subject	Public Comment Statements (PCS) and Forest Service Responses
	motorized users. (15.1, 22.30, 22.46, 22.132, 70.1, 71.5, 76.3, 79.4, 137.88, 148.9, 170.1, 268.35, 268.42)
	<b>Response:</b> The public involvement process for this project is open to all who chose to participate. The level of engagement throughout the process is voluntary; therefore, the Forest Service is not in direct control over the balancing of representation of different individuals and interest groups. The Forest Service has disseminated information to the public through a variety of avenues such as open houses, newspaper articles, collaborative meetings and posting information on the Forest webpage. All comments are considered by the deciding official and no weight is given to comments provided by any of the interested parties. Notification of the availability of the EIS and draft ROD will be provided to all those that provided comments on the EIS and to other required agencies and other forms of notification will also be used to include our website, and notices in the local newspaper.
Chapter 1-Issues	PCS 05: The Forest Service should include measurement indicators in the Water Qualities and Fisheries Key Issue portion of the EIS found on page 11, stating that RHCAs widths are specific to the body of water as specified in INFISH, unless site specific rationale is given for the variation. (273.47)
	<b>Response:</b> The reference on page 11 to RHCAs is a general definition of the term. A specific definition for the buffer widths will be added to the FEIS.
Chapter 1-Issues	<b>PCS 06:</b> The Forest Service should consider the poor timing of this plan. Those engaged in public access and natural resource issues in the Legislature are very busy this time of year without adequate time to provide comments on this plan. (110.4)
Chapter 1-13sues	<b>Response:</b> The Forest Service recognizes that the timing of the release of this Draft EIS may have been inconvenient for some individuals. There will be another opportunity for public comment and Forest Service response during the Project-Level Pre-decisional Administrative Review Process that will begin with the issuance of a Final EIS and decision document.
	PCS 07: The Forest Service should ensure that there is no confirmation bias in this plan. Evaluation should include a broad screening of issues, information, data, opinions, and needs throughout the plan so that confirmation bias is negated in this plan. An important addition could be the inclusion of motorized recreationalists on the inter-disciplinary team. (22.39)
Chapter 1-Decision Framework	<b>Response:</b> The preparation of Travel Plans is an established National Forest System planning activity mandated by the 2005 Travel Management Rule. The use of interdisciplinary teams during the NEPA process is also a required and standard process for the Forest Service. Interdisciplinary teams are made up of agency resource specialists and not members of the general public. The public involvement and collaboration processes we used for this project were designed to gather feedback and comment from all interested and affected parties, including motorized recreationists.
Chapter 1, Decision Framework	<b>PCS 08:</b> The Forest Service should include a study of personal, commercial, community, county, state, and national impacts to the user base during the decision making process, before a final plan is adopted. Also consider identifying the user-base through selling access stamps for given areas; this would provide a user database while also providing revenue. (15.6, 203.2, 245.2, 245.5, 255.2)

Subject	Public Comment Statements (PCS) and Forest Service Responses
	Response: It is unclear what user-base this comment refers to. It is also unclear what kind of study the commenter is requesting. However, we have made a diligent effort to reach out to the public and other agencies and groups during our public involvement process to gather comments and input. This comment and input has been considered in the development of the EIS. Each specialist analyzes the effects to their respective resource, discloses those effects and offers resource protection measures to minimize or eliminate negative or harmful effects. In regard to your suggestion to sell stamps to generate revenue, we have guidelines to follow for appropriate ways to generate revenue. This is not one of them. The Federal Lands Recreation Enhancement Act guides this process and authorizes the Forest Service to charge standard and expanded amenity recreation fees and to require and charge fees for special recreation permits. We are not allowed to charge fees for general recreation access or use. Establishing non-fee registration programs or permits has been done on some Forests, particularly in wilderness areas, to establish and gather user information data.
Chapter 1-Decision Framework	PCS 09: We support this travel planning effort and feel it provides a rare opportunity to substantially move the Helena National Forest toward meeting forest plan goals, objectives and standards. (46.94)
	Response: Thank you for your comment
Chapter 2-General	PCS 010: The Forest Service should create an alternative that maintains the existing level of motorized access and recreation, in addition to Alternative 1. (22.95)  Response: The situation of providing the existing level of motorized access and recreation is provided and analyzed as Alternative 1. Providing a second alternative with the same access levels would be redundant.
Chapter 2-General	PCS 011: The Forest Service should add Aquatic Threatened and Endangered Species to the Table on page S-15 and to Table 6, as is done for the Terrestrial Threatened and Endangered Species. (273.44, 273.57)
	Response: This information will be added to page S-15 and to Table 6 in the EIS.
Chapter 2-General	PCS 012: The Forest Service should ensure that the travel plan addresses open roads going through the big game winter ranges, which is prohibited within the current Forest Plan. (21.33)  Response: Current Forest Plan direction does not preclude all motorized travel through big game winter range. The Forest Plan standard addressing motorized use within big game winter specifies "all winter range areas will be closed to vehicles between December 1 and May 15. Exceptions (i.e., access through winter range to facilitate land management or public use activities on other lands) may be granted. Vehicle travel should be limited to designated routes through big game winter range from 12/2 through 5/15". This has been analyzed in the EIS and is also analyzed in the Blackfoot/North Divide Winter Travel Project.
Chapter 2-General	PCS 013: The Forest Service should reanalyze all of the roads and trails in the Travel Plan as there are multiple errors. The following corrections are not all inclusive: (1) The Continental Divide Trail between Stemple and Flesher Pass is listed as motorized, and this single track trail has been closed to motorized use since 2012. (2) Road 4113-A1 is listed as "Naturally

Subject	Public Comment Statements (PCS) and Forest Service Responses
	Reclaimed" when very recently logging destroyed much of this area. This road is also listed as connecting to U-412, but this connection has been abandoned and the only way to connect to U-412 is via 4113- A3. (3) 4113-A3 is listed as a motorized trail that is closed October 15 through June 30, but this trail is very much naturally reclaimed. (4) U-411 and U-412 are listed as unauthorized roads with seasonal restrictions, but these are naturally reclaimed and shouldn't be considered roads. (5) Road 4113-91 is listed as an established road with vehicle restrictions, but this road was naturally reclaimed with Kelly humps in 2011. (6) Road 4113-C1 and 4113-A4 are not shown on the maps, but are completely naturalized unless logging operations reopened them in the last 2 years. (7) U-411, U-412 and 4113-81 are naturally reclaimed and are hard to follow on the ground. (118.10, 118.11, 118.12, 118.13, 118.14, 118.19)
	<b>Response:</b> 1) The Continental Divide National Scenic Trail (CDNST) between Flesher Pass and Stemple Pass is currently open to two-wheel motorized use. There was no Forest decision that changed the management of this particular segment of the CDT in 2012. 2) We reviewed your comment regarding the 4113-A1 road and we feel that this is correctly described in alternative 2 and there is no need for change.
	3) Route 4113-A3 is proposed for decommissioning in alternatives 3 and 4 and storage in alternative 2. Its current status under alternative 1 is 'naturally reclaimed'
	4) U-411 and U-412 are proposed for decommissioning in alternatives 3 and 4
	5) All segments of route 4133 are proposed for decommissioning in alternatives 3 and 4
	6) All segments of route 4133 are proposed for decommissioning in alternatives 3 and 4
	7) All of these routes are proposed for decommissioning in alternatives 3 and 4
	<b>PCS 014:</b> Across all alternatives the Forest Service should standardize the trail openings and closures to May 30-October 15, and use closures during elk archery season only when necessary. Trails should be made single-track wherever possible, and trail loops should be encouraged. Trails 467, 401, 404, 440, 417, 103, U4112, U104, and a system in the 1st, 2nd, and 3rd gulches should all be made open to motorized recreation. (128.12, 180.9, 238.2)
Chapter 2-General	Response: Your first suggestion to have one consistent seasonal closure period was considered and is discussed in chapter 2. Narrowing tread widths on motorized trails 50 inches or wider to single track width would preclude ATV travel, whereas a motorized route open to vehicles less than 50 inches wide allows for travel by both ATV and motorcycle. Numerous segments of new motorized trail construction are being analyzed through the Blackfoot Non-Winter Travel Plan process. This new construction, brought forward in Alternative 4, would provide links between open motorized routes affording additional loop opportunities in many areas of the Lincoln Ranger District, including the 1st, 2nd, 3rd gulch area. Alternatives 1-4 have analyzed various management options for trails 467, 401, 404, 440, 417, U103, U4112, and U104. Under alternative 1, the no action alternative, all of these routes would be open to some form of motorized travel. The entirety of trails 467 and 417, along with part of U4112 would be open to motorized recreation under Alternative 4.
Chapter 2-General	<b>PCS 015:</b> Across all of the alternatives the Forest Service should address and correct the information pertaining to the private landowners concerns regarding Roads 4090- C1 and U-419. 117.2, 117.3, 117.4, 117.5, 117.6, 117.7, 117.8)
	Response: We have considered the landowner's concerns in this area. The landowner provided a map to us with

Subject	Public Comment Statements (PCS) and Forest Service Responses
	alternatives to consider and these are reflected in alternatives 3 and 4
Chapter 2-General	<b>PCS 016:</b> The Forest Service should clarify on page 26 of the EIS if the roads south of highway 200 will be stored by gates in relation to grizzly bear, and if so, should disclose that other aspects of storage as specified in Table 4 such as removal of stream culverts would also apply, if that is the case. (273.48)
	<b>Response:</b> Anticipated closure methods for road closure, storage and decommissioning categories is discussed in chapter 2 and analyzed in chapter 3 of the EIS.
Chapter 2-General	PCS 017: The Forest Service should consider adding the USDA USDI 2008 biological Assessment regarding bull trout to Table 6. (273.50)
	Response: We will consider this for the EIS.
Chapter 2-Alternative 1	PCS 018: The Forest Service should consider adopting Alternative 1 as it provides the best access for the recreating public, it does not close the CDNST to motorized use, it serves the best interest for mining areas located in T13N R7W, and should not require a Forest Plan amendment to be completed prior to the adoption of the Travel Plan. (2.1, 2.2, 11.1, 77.4, 101.5, 101.8, 110.1, 125.37, 154.2, 157.2, 170.2, 238.1, 342.1)
	<b>Response:</b> Thank you for expressing support for alternative 1. The Forest Service developed action alternatives to analyze differing levels of recreational access, access to ownership interests within the Forest and forest resource protection. The ultimate travel plan decision will be informed by the analyses of all of these alternatives, including alternative 1.
Chapter 2-Alternative 1	PCS 019: The Forest Service should consider adopting Alternative 1 without the inclusion of the Granite Butte Proposed Research Natural Area. (148.8)
	<b>Response:</b> This is the same as PCS 39. The Granite Butte Research Natural Area is not proposed in this Travel Plan; it is an existing proposed RNA within the Forest Plan and will continue as such regardless of this Travel Plan.
Chapter 2. Alternative 1	PCS 020: The Forest Service should consider trail modifications in Alternative 1 by classifying Trail 417 as a single track motorized trail, and approving the connection of U005 at the head of 1st Gulch at the top of section 15 to the bottom of section 11 on T15N-R07W. (1.3, 91.4, 125.36)
Chapter 2, Alternative 1	Response: The IDT has looked at these items and has considered each for inclusion in one of the action alternatives. Being considered doesn't necessarily mean that they will be added to an action alternative, some may not – but each item was discussed at length by the IDT; any alternatives that were considered but not in detail are also described in chapter 2.
Chapter 2-Alternative 1	PCS 021: The Forest Service should revise Alternative 1 so that the baseline for the travel system does not reflect any of the user created routes that are currently in the forest. (46.2)
	Response: As per the 2001 Tri-State OHV Decision, if a route was on the ground prior to 2001, it needs to be recognized as

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	existing until a site-specific analysis is complete to determine if it should be incorporated into the National Forest System.  This Travel Plan is a site-specific plan that analyzes the various unclassified roads and trails in accordance with the OHV Decision. Please refer to the recreation report for further information.
	PCS 022: The Forest Service should revise or clarify the number of miles of unauthorized routes that are listed in the EIS since the summary and table for alternative 1 state 62 miles, and page 51 states there are 156 miles, and table 19 on page 67 states 76 miles. (273.11)
Chapter 2-Alternative 1	Response: We will check these inconsistencies in the EIS and make corrections if needed. The 62 miles referenced in the summary table refers to roads not previously part of the road or trail inventory (unauthorized routes) that are currently open to public motorized use. The 156 miles of unauthorized routes referenced on page 51 refers to all unauthorized routes – not just those currently open. If a correction or clarification is needed to table 19 it will be reflected in the EIS
Chantan 2 Altamatics 4	PCS 023: The Forest Service should consider not adopting Alternative 1 as it takes no action to benefit the forest, does not include a Motor Vehicle Use Map, and allows the unauthorized routes to remain open and further damage the natural resources in the forest. (137.8, 137.30)
Chapter 2-Alternative 1	<b>Response:</b> The Forest Service developed action alternatives to analyze differing levels of recreational access, access to ownership interests within the Forest and forest resource protection. The ultimate travel plan decision will be informed by these analyses.
Chapter 2-Alternative 2	PCS 024: The Forest Service should consider adopting Alternative 2 as it represents the best compromise between motorized and non-motorized recreation, it mitigates resource concerns associated with travel routes, includes the presence of bicycles, motorcycles, and ATVs on the forest, and is the most consistent with the Helena Forest Plan requirements. (64.2, 76.2, 87.2, 113.3, 115.10, 120.1, 120.2, 121.4, 128.1, 132.1, 156.1, 161.2, 164.1, 172.1, 189.1, 205.2, 274.1, 274.2, 274.3, 281.1, 281.2)
	<b>Response:</b> Thank you for expressing support for alternative 2. The Forest Service developed action alternatives to analyze differing levels of recreational access, access to ownership interests within the Forest and forest resource protection. The ultimate travel plan decision will be informed by these analyses, including alternative 2.
Chapter 2-Alternative 2	PCS 025: The Forest Service should consider revising the fisheries section in Alternative 2 of the final document to state that fisheries would benefit little from sediment reductions in most 6th HUCs in the planning area. (273.34)
·	<b>Response:</b> Analysis and conclusions for alternative 2 are included in the Aquatic Species and Habitat report and will be clarified in the EIS.
Chapter 2, Alternative 2	PCS 026: The Forest Service should correct an error in Alternative 2: 4113-A1 does not connect to U-412 as indicated and 4113-A3 is no longer noticeable on the ground and has been reclaimed. The Forest Service should also consider increasing motorized access in Alternative 2 by making trails 401, 404, 417, 217, 467, and 1872 open to yearlong motorized recreation as single track trails. (118.9, 124.1, 191.3, 239.10, 278.1)

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	Response: The project IDT reviewed your comments regarding alternative 2 and the 4113-A1 and A3 road. Based on further verification, we feel that we have described this adequately in alternative 2 and that there is not an error here. The suggested changes to alternative 2 were also considered in the range of alternatives, as follows: Trail 401 and 404 are motorized in alternative 1; trail 417 is motorized in all alternatives; we do not have a trail 217; trail 467 is motorized in alternatives 1, 2 and 4; and we do not have a trail 1872 but there is a 1827 road and we do not agree that it is appropriate to convert this existing road to a motorized trail.
Chapter 2, Alternative 2	PCS 027: The Forest Service should consider making trail 417 non-motorized, and trails 440 and 487 open to motorized recreation in Alternative 2. (42.1, 45.13, 211.19)  Response: As described in chapter 2 of the EIS, we considered this suggestion regarding trail 417 but ultimately dismissed it from further detailed analysis. Trail 417 is proposed to continue as a motorized trail in all alternatives. It is also proposed as motorized snow route in the separate Blackfoot Winter Travel/North Divide environmental assessment. We don't have the option of managing this trail as non-motorized given the manned fire lookout as well as the Homeland Security electronic/microwave/radio site under special use permit with Lewis & Clark County accessed by this trail. Your suggestions regarding the other two trails are considered as part of the range of alternatives: Trail 487 south of 467 is proposed to be non-motorized and motorized north of 467 in Alternative 2. Trail 440 is the CDNST and has portions that are proposed as motorized in Alternative 2.
Chapter 2, Alternative 2	PCS 028: The Forest Service should not select either Alternatives 1 or 2 of the Blackfoot Travel Plan for the following reasons: (1) Alternative 1 leaves too many roads open that will result in resource destruction and it does not include a MVUM for travel. (2) Alternative 2 proposes too much of an increase in road densities that will also result in resource destruction. (3) Both alternatives are inconsistent with Forest Service Manual 2553.44b, authorize too much motorized travel, allow ORVs in roadless areas, do not focus on the cumulative effects on forest resources, and are not compatible with the goals of the Comprehensive Plan for the CDNST. (114.30, 137.20, 251.2, 273.41, 283.1, 283.2)  Response: Thank you for your comments. As expected, the public comments on this project expressed the full range of opinions regarding motorized use. The IDT analyzed the effects of each alternative following laws, policies, and procedures that are in place. The final decision will include future management direction that will also comply with laws, policies, manual direction, and procedures that apply. Please see the Recreation analysis and the Inventoried Roadless Report of the EIS for the effects of each alternative on motorized and non-motorized opportunities and cumulative effects.
Chapter 2, Alternative 2	PCS 029: The Forest Service should not select Alternative 2 for the Blackfoot Travel Plan for the following reasons: (1) It increases the amount of roads in the forest which will require increased maintenance because of the decision to store roads rather than decommission them, creating a complex travel plan; (2) It does not support the restoration and preservation of fish, wildlife, wetlands, quiet trails, and clean water; (3) It will increase the recreation conflicts currently occurring in the forest; (4) It does not support the goals for the CDNST or the current Helena Forest Plan; (5) It adopts the inadequate amendment regarding elk security, which will weaken elk security. (46.8, 46.14, 46.15, 46.16, 58.19, 71.2, 89.1, 98.1, 98.10, 98.43, 107.1, 107.5, 114.35, 137.9, 137.31, 162.1, 190.1, 190.2, 190.3, 226.2, 273.2, 273.12, 273.16)

Subject	Public Comment Statements (PCS) and Forest Service Responses
	Response: Thank you for your comments. As expected, the public comments on this project expressed the full range of opinions regarding motorized use. We heard from many people who would prefer more motorized opportunities, as well as those who would prefer more non-motorized opportunities. Both points of view were considered in meeting the Purpose and Need to better manage natural resources, improve recreation management in regard to motorized recreation and decrease user conflicts. The IDT analyzed the effects of each alternative utilizing the best available scientific information and following laws, policies, and procedures that are in place. These analyses are summarized in chapter 3 of the EIS. The final decision will include future management direction that will also comply with laws, policies, manual direction, and procedures that apply. Information regarding elk security is in the wildlife section of the EIS, and the recreation analysis identifies the effects of each alternative on motorized and non-motorized opportunities and cumulative effects.
Chapter 2, Alternative 2	PCS 030: The Forest Service should ensure that Alternative 2 minimizes exclusive use from and to private lands as stated in the project objectives. Motorized use should not be allowed out the back door of private land holdings and alternative 2 fails to address this. (58.22)
Chapter 2, Alternative 2	<b>Response:</b> The IDT looked very hard at this issue and made an attempt to resolve as many of these situations with the travel plan as possible. However, some of these situations may need to be addressed through a special use permit, which has been noted and will be handled outside of this travel plan process/decision.
	PCS 031: The Forest Service should not select Alternative 2 of the Blackfoot Travel plan because it will change Hogum Creek Road 1841 to a motorized system trail open to vehicles less than 50" in width, which will prevent the mining company from accessing their claim in that area. (104.10)
Chapter 2, Alternative 2	Response: Thank you for your comment. The EIS identified that closed roads in general are a barrier to mineral activities. Road 1841 is closed in Alternative 1. The EIS also identified that there would be a negative impact to potential mineral activities in the Seven-Up Pete area specifically due to the need for authorizations for access (EIS p113). There are currently no mineral plans of operation that have been submitted in the area of road 1841.  This issue was also considered during the development of alternative 4, described in chapter 2 of the EIS. When making a decision the Decision Maker does not need to choose an alternative in its entirety. The Decision Maker has the discretion to choose pieces of each alternative in the final Decision.
Chapter 2, Alternative 3	PCS 032: The Forest Service should select Alternative 3 in the Blackfoot Travel plan for the following reasons: it represents the best balance between motorized and non-motorized recreation; it upholds the multiple use mandate; it provides good connector trails; it focuses on resource preservation and conservation, is the environmentally preferred alternative, and recognizes the need for quiet non-motorized recreation; it contains the best wildlife security standards; it closes/stores/decommissions an equitable amount of roads and trails; it includes realistic trail maintenance; it includes the desired management of Scapegoat Wilderness Portal Trails; it is consistent with the Comprehensive Plan by making the CDNST non-motorized; and it is the most cost-effective alternative included in the plan. (5.1, 16.1, 20.1, 23.1, 23.2, 23.3, 23.4, 23.5, 26.1, 27.1, 28.2, 28.3, 29.1, 31.1, 32.1, 33.1, 34.1, 38.1, 39.1, 39.4, 39.5, 40.1, 44.1, 45.6, 47.1, 47.2, 47.4, 47.6, 48.1, 49.1, 54.1, 54.3, 56.1, 56.3, 56.7, 58.1, 58.7, 58.25, 58.31, 58.37, 58.39, 58.49, 59.1, 60.1, 61.3, 67.1, 68.10, 71.1,

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	71.3, 71.4, 71.8, 72.1, 81.1, 87.3, 88.1, 88.2, 88.3, 88.4, 88.7, 88.8, 89.2, 93.1, 94.1, 96.2, 98.2, 98.6, 98.13, 98.16, 98.17, 98.20, 98.38, 98.45, 98.50, 98.51, 98.52, 99.1, 102.1, 102.4, 104.9, 105.1, 106.1, 107.2, 111.1, 112.1, 114.13, 114.25, 114.26, 114.38, 123.2, 126.1, 129.1, 130.1, 130.3, 131.3, 133.1, 134.1, 137.7, 137.10, 137.21, 137.29, 137.32, 137.47, 137.48, 137.62, 138.1, 139.1, 141.1, 142.1, 143.1, 145.2, 146.1, 147.1, 153.1, 160.1, 162.2, 162.6, 162.8, 163.1, 166.1, 168.1, 171.1, 173.2, 174.1, 177.1, 178.1, 181.6, 182.1, 183.1, 184.3, 184.4, 185.1, 188.1, 190.4, 190.9, 190.10, 190.11, 193.1, 194.1, 196.1, 197.1, 199.1, 201.1, 202.1, 208.1, 208.2, 208.3, 217.1, 217.2, 218.1, 222.1, 224.1, 225.1, 227.17, 227.18, 228.1234.1, 236.1, 237.1, 240.1, 247.1, 247.68, 250.2, 251.1, 253.1, 264.6, 266.1, 267.1, 267.3, 267.6, 273.3, 275.1, 277.1, 278.5, 283.4, 283.22)
	Response: Thank you for expressing your support for alternative 3.
Chapter 2, Alternative 3	PCS 033: The Forest Service should select Alternative 3 of the Blackfoot Travel Plan, with the following modifications: reclaim and decommission more roads, restrict motorized vehicles from driving off of legal routes to dispersed campsites: retain current Forest Plan elk security standards and keep the CDNST and the Helmville-Gould trail non-motorized; apply seasonal motorized restrictions to archery season as well; and manage inventoried roadless areas as non-motorized with no new routes. (25.1, 28.1, 30.1, 41.1, 43.1, 44.2, 47.5, 56.5, 58.27, 58.32, 61.2, 68.11, 71.6, 74.1, 75.1, 83.1, 88.9, 111.3, 114.22, 118.6, 122.2, 123.1, 127.1, 127.10, 131.2, 156.2, 162.12, 165.1, 175.1, 184.4, 221.1, 226.1, 231.4, 232.2, 235.1, 239.6, 241.1, 243.2, 243.3, 244.1, 244.3, 249.1, 259.1, 260.1, 262.1, 263.1, 279.2, 283.3,)  Response: Thank you for your support of alternative 3 with suggestions for changes. Your suggestion to increase the level of road decommissioning is a component of alternative 4. Routes to established dispersed camping sites are a component of alternative 4 and are shown on maps in appendix G. Your suggestion to retain the existing Forest Plan elk security standard is a component of alternative 1. Your suggestion to keep the Continental Divide Trail non-motorized is a component of alternatives 3 and 4. Your suggestions to keep the Helmville Gould trail non-motorized and to apply archery seasonal restrictions to motorized use are components of alternative 3. Your suggestion to not create any new motorized
	routes in inventoried roadless areas is a component of alternative 2, 3 and 4; existing motorized routes in IRAs would be reduced under these alternatives. Motorized use in inventoried roadless areas would continue to be provided, however, under any of the alternatives; this is an appropriate recreational use within roadless areas.
Chapter 2, Alternative 3	PCS 034: The Forest Service should adopt Alternative 3 of the Blackfoot Travel Plan as it will benefit various Hydrologic Unit Codes (HUCs) through the removal of road culverts and reduction of stream sedimentation. To further awareness of the effects on water and fish please consider noting in the effects section of the 6th HUC narrative or table, the number of miles and crossings within 150 feet of streams added to the system via unauthorized routes, and the number of stream crossings that will be removed from stored roads. Having a separate line in the tables within the hydrology section of the EIS that shows the number of crossings removed from stored roads would be very informative and may eliminate some of the confusion on sediment figures currently present in some of the tables in the hydrology and fishery sections of the EIS. (137.52, 152.1, 273.24, 273.35, 273.53, 273.54, 273.55,)
	Response: Thank you for your support of alternative 3. We will consider your suggestions for changes to the hydrology

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	section of the EIS and will update this analysis, as appropriate.
Chapter 2, Alternative 3	PCS 035: The Forest Service should make the following correction under alternative 3: The description in alternative 3 states that a short section of the CDNST would remain open to ATVs to allow drivers to make a loop from Cellar Gulch ATV Way to Marsh Creek Road, but the map for Alternative 3 does not reflect this and places the ATV section between Cellar Gulch ATV Track and the Helmville-Gould Trail #467. (98.26)
	Response: The IDT has looked at this and made the appropriate adjustments.
	PCS 036: The Forest Service should select Alternative 3, with some modifications specifically for the mining operations located within the Travel Plan area: (1) Road 1825Fshould be designated for year round use of highway legal vehicles so the mining company can continue to access the southwest portion of their mining claim. (2) The mining company can continue to access the Columbia Mine Project via the Hogum Creek Road 1841, under the provisions of Special Use Permits. (3) In general, open mining exemptions should be allowed for roads used historically for mining and personal property access. (104.4, 104.5, 104.7, 125.13,)
	Response: Thank you for these suggestions. We have considered them as follows:
Chapter 2, Alternative 3	(1) As described in the EIS, Atna/CR Montana Corporation would need to submit a mineral plan of operations to utilize a road closed in the selected alternative for this project (EIS).
	(2)Road 1841 to the private land/Seven Up Pete project area in Section 20 and 29 is open yearlong to highway legal vehicles in Alternative 3 so no additional authorization would be needed for motorized access to the property. For motorized access to unpatented mining claim areas that do not have an open motorized route, a claimant would need to submit a Plan of Operations and go through the requisite evaluation and approval process as described on pages 108-110 and 112-118. The analysis on those pages recognizes road closures can have a direct negative effect to mineral activities.
	(3) The direction and authority for managing the transportation system (and other resources) on National Forest System lands comes from the National Forest Management Act and the Federal Land Policy and Management Act. Specifically, the purpose and need for this project which includes proposed changes to the transportation system, is described in Chapter 1, Purpose and Need for the Project on pages 1-16. See also response to (2).
Chapter 2, Alternative 3	PCS 037: The Forest Service should select Alternative 3 but clarify the following items in the EIS: (1) Ensure that miles of road and trail needing maintenance are described in table 6 and that needed resources are available to properly maintain roads and to enforce the Travel Plan requirements; (2) Ensure that the final plan has additional discussion of road and trail conditions, and improved road and trail maintenance and best management practices; (3) Ensure that the alternative meets all of the necessary laws, regulations, and the Helena Forest Plan's goals, objectives, and standards. (46.7, 137.21, 137.39, 273.52)
	<b>Response:</b> Road maintenance funding is allocated to each Forest based on overall roaded land area and recreation visitor use. Forests are given targets for passenger car and high clearance miles of maintenance which must be accomplished with the allocated dollars. Any remaining funding is distributed based on priorities established by Forest managers. Funding available for travel plan enforcement will vary year to year due to variability of allocated federal dollars but initial emphasis

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	will be placed on signing and educating the public, especially on routes that will have management changes from the existing condition. Road and trail conditions vary across the Lincoln Ranger District and are constantly changing. We do not maintain all of our system trails to standard every year due to funding limitations. Some trails receive a higher level of maintenance and at more frequent intervals based on public use. We do make adjustments to maintenance priorities for roads and trails to respond to resource concerns. Establishing the maintenance priority for roads and trails is not part of this particular analysis but would be a step taken during the implementation phase where resource conditions and other factors would be considered.
	The agency selected alternative will meet applicable laws, regulations, and standards. Project design features and best management practices would apply to any alternative selected, and are discussed in the EIS. Implementation of alternative 4 would result in the fewest miles of designated NFS roads among any of the alternatives, reducing the level of maintenance needed.
	The EIS includes additional discussion of road maintenance, monitoring and implementation in chapter 2.
Chapter 2, Alternative 3	PCS 038: The Forest Service should not adopt Alternative 3 for the Blackfoot Travel Plan for the following reasons: (1) The multiple use mandate is unable to be satisfied because there are too many limitations on motorized access in this alternative. (2) The seasonal closures in this alternative are far too restrictive; (3) The motorized restriction proposed on Trails 467, 440, 487, and the 4083 trails in sections 9 and 16, will negatively impact hunters and recreationalists; the Helmville Gould trail should not be closed to motorized use and 4) the significant cumulative loss of motorized use has not been mitigated. (1.1, 1.4, 1.5, 1.6, 45.12, 56.2, 64.1, 87.1, 115.5, 121.2, 205.1, 211.18, 257.4, 268.61, 268.83, 278.2)  Response: Alternative 3 is merely one alternative being considered. The recreation section of chapter 3 of the EIS analyzes the expected impacts of all proposed actions under each alternative to motorized recreationists and hunters.
Chapter 2-Alternative 3	PCS 039: The Forest Service should consider not adopting Alternatives 2 or 3 because they both decommission too many roads and trails, which will result in an economic loss from ATV users, will increase the amount of off-roading in the area, and decrease the overall recreation ability in the forest. The also both include the Granite Butte Research Natural Area, which should not be proposed. (77.5, 77.6, 97.1, 103.1, 103.2, 148.1, 148.2, 152.4, 268.46)
	Response: Effects from proposed actions to socioeconomics, recreation and other resources are included in chapter 3 of the EIS. The Decision Maker takes into account many issues when making a decision. A complex decision such as a Travel Plan involves balancing several resource areas and interest groups. The Forest Service strives to strike a balance with resource protection and providing diverse recreation opportunities. The Granite Butte Research Natural Area is not proposed in this Travel Plan; it is an existing proposed RNA within the Forest Plan and will continue as such regardless of this Travel Plan.
Chapter 2-Forest Plan Amendment	PCS 040: The Forest Service should consider not adopting the Forest Plan Amendment and keep the current elk security standards. Separate NEPA analysis is more appropriate for this amendment. (49.2, 89.3, 196.2, 199.5, 231.1, 249.3, 264.7, 267.7, 342.9)

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	<b>Response:</b> We recognize that combining the forest plan amendment proposal with the travel plan proposal creates a more complex NEPA analysis. However, it is an appropriate way to evaluate the site-specific effects of each proposal and their alternatives. The EIS provides additional analysis of effects to elk from the Forest Plan amendment for elk. We have made efforts to ensure adequate understanding of each component by having a separate comment period for the amendment component, ultimately issuing a separate decision for the amendment component, and separating the bulk of the analysis of the amendment into appendix F of the EIS.
Chapter 2-Project Design Features	PCS 041: The Forest Service should consider having project design features include suggestions made in the general comments. Of note are those suggested by EPA and include: 1) minimize road construction and reduce road density as much as possible to reduce potential adverse effects to watersheds; 2) locate roads in uplands, away from streams and riparian areas as much as possible; 3) minimize the number of road stream crossings; 4) locate roads away from steep slopes or erosive soils and areas of mass failure; 5) stabilize cut and fill slopes; provide for adequate road drainage and control of surface erosion with measures such as adequate numbers of waterbars, maintaining crowns on roads, adequate numbers of rolling dips and ditch relief culverts to promote drainage off roads avoid drainage or along roads and avoid interception and routing sediment to streams; 6) consider road effects on stream structure and seasonal and spawning habitats; allow for adequate large woody debris recruitment to streams and riparian buffers near streams; 7) properly size culverts to handle flood events, pass bedload and woody debris, and reduce potential for washout; 8) replace undersized culverts and adjust culverts which are not properly aligned or which present fish passage problems and/or serve as barriers to fish migration; 9) use bridges or open bottom culverts that simulate stream grade and substrate and that provide adequate capacity for flood flows, bedload and woody debris where needed to minimize adverse fisheries effects of road stream crossings. (137.18, 137.89, 273.37)  **Response: Thank you for these suggestions. We have considered these suggested design features and those that were appropriate to this analysis have been added to this section of chapter 2 of the EIS. The Forest Service is not required to follow EPA guidelines but current road design practices implemented on the Forest include many of these recommendations from the EPA. Structures are typically placed outside the stream channel and stream restoration
	and 2 structures on South Fork Poorman Creek.
Transportation/General	<b>PCS 042:</b> The Forest Service should consider an alternative that includes equal sharing of the forest between motorized and non-motorized users on lands outside of Wilderness. This would be consistent with multiple-use ideals that are not currently being met. This alternative should analyze future trail additions and not just the current system and should consider the fact that non-motorized users can use motorized routes (but not vice versa) and adding more non-motorized routes over motorized routes does not meet this equal sharing. (22.7, 22.63, 22.78, 22.79, 22.80, 22.81, 22.83, 22.84, 22.99, 22.147, 248.3, 268.19, 268.34, 268.36, 268.38, 268.44, 268.63, 268.44, 268.66, 268.78)
	<b>Response:</b> Thank you for this suggestion for a new alternative. As described in more detail in chapter 2 of the EIS, we did consider an 'equal sharing' or pro-recreation alternative but it was not carried forward for detailed analysis. Alternatives 2, 3

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	and 4 as described in the EIS are the IDT's best attempt at providing a full range of recreation options while balancing recreation and resource protection needs. Alternative 4 was developed based on public input and does address these suggestions.
Transportation/General	PCS 043: The Forest Service should ensure the EIS includes 1) site-specific analysis (since it is required by the final OHV rule), 2) monitoring and quantification of existing motorized use versus non-motorized use, 3) types of motorized use and visitors, and 4) socio-economic impacts and effects of motorized closures on the quality of the human environment. This evaluation should carefully consider the intent of the Final OHV Rule and use it to designate existing motorized routes and create new motorized routes and not emphasize road/trail closures. (22.32, 22.33, 22.34, 22.65, 22.66, 22.67, 22.87, 22.89, 22.121, 274.4)
	<b>Response:</b> The purpose of this analysis is to determine the motorized and non-motorized system routes within the planning area. Four action alternatives have been provided that look at a reasonable range of both motorized and non-motorized uses while balancing these recreational demands with environmental/biological concerns. The IDT analyzed each alternative appropriately following laws, policies, and procedures that are in place. The final decision will include future management direction that will also comply with laws, policies, manual direction.
Transportation/General	PCS 044: The Forest Service should consider that there is a trend of excessive motorized access closures is becoming overly restrictive and too many gates across and this is having a significant impact on the number of visitors to the forest. The final travel plan should provide an equitable level of motorized access and loop trail connectors such as those within the Gould-Helmville and Mike Horse areas so people can enjoy the forest and not create illegal routes. The plan should also consider alternating use between motorized and non-motorized uses weekly. (22.48, 64.3, 77.1, 77.8, 91.2, 103.5, 169.1, 169.5, 239.15, 257.3, 268.67, 268.68)
Transportation/General	Response: We recognize the demand for both motorized and non-motorized opportunities in the planning area. We have been working cooperatively with the motorized community to develop loop trails and connectors suggested here. Alternatives 2, 3 and 4 include these proposals. Proposed loop trails in the Helmville Gould area is a component of alternatives 2 and 3 and the Mike Horse area loop trail is a component of alternatives 2, 3 and 4. We also considered this suggestion to alternate use weekly. As described in more detail in chapter 2 of the EIS, this was not carried forward for detailed analysis due to administrative and law enforcement concerns.
Transportation/General	PCS 045: We support the creation, designation and management of non-motorized trails, but not at the expense of motorized visitors. We request that the Forest Service not use the existing motorized trail inventory for designating non-motorized trails. Instead, if there is a need for non-motorized trails, then the Forest Service should consider options that do not reduce the existing opportunity for motorized users. The Forest Service should also consider converting all roads being closed to full size vehicles to ATV routes rather than just closing them and allow single track motorized use on cattle trails. (22.49, 22.56, 22.75)
	<b>Response:</b> The Helena NF has considered the suggestion to convert some roads to motorized trails in all three of the action alternatives. We did this in the 1st, 2nd, and 3rd Gulch areas in Alternatives 2, 3, and 4. We did not propose this everywhere

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	in order to balance social/biological needs/concerns of the area. All three action alternatives include a range of motorized trail options for both two-track and single-track trails. As discussed in response to other comments, we did consider an 'equal sharing' or pro-recreation alternative and this is described in more detail in chapter 2 of the EIS; it was not carried forward for detailed analysis. We also considered your suggestion to use cattle trails for motorized single track as described in more detail in the chapter 2 of the EIS; it was also not carried forward for detailed analysis.
	<b>PCS 046:</b> The Forest Service should consider addressing in the plan the growing popularity of motorized recreation by aging people and their needs for motorized access in order to enjoy as much of the outdoors as possible. (22.88, 22.101, 268.87)
Transportation/General	<b>Response:</b> The Forest Service recognizes the importance of providing motorized use opportunities; the range of alternatives described in the EIS are designed to strike a balance between providing a diverse range of recreation opportunities and resource needs and protection. Alternatives 2 and 4 both provide more motorized opportunities than either alternative 1 or 3.
Transportation/General	PCS 047: The Forest Service should consider allowing for amendments as required to create new trails, connect trails to create motorized loops like with trail 467, extend trails, and make minor boundary adjustments to allow a motorized trail to meet the needs of motorized users. The Forest Service should consider that there are established principles for promoting cooperation and understanding among trail users that will help reduce conflict on multiple-use trails; these should be incorporated into the plan. (22.90, 210.1, 268.69, 268.70, 268.80)
	<b>Response:</b> During the development of alternative 4, the planning team specifically sought opportunities to create loop trails in areas suggested by commenters. Some additional trails are proposed in Alternative 4. Adjusting the National Boundary is beyond the scope of this travel plan. The Lincoln RD values the importance of consulting and collaborating with trail users and this has been a component of this process.
Transportation/General	<b>PCS 048:</b> The Forest Service should consider proactive recreation management by allowing all reasonable roads to be dual use. This would provide a system of inter-connected OHV routes that would minimize the creation of illegal motorized activity and enhance recreation opportunities. (22.91, 22.92, 22.93, 22.96)
	<b>Response:</b> The purpose of this analysis is to determine the motorized and non-motorized system routes within the planning area. Helena National Forest has prepared a range of alternatives to consider for motorized and non-motorized uses; however, the determination of which roads would ultimately be open for dual use (we assume you mean mixed motorized use) is not part of this decision. This is discussed in more detail in chapter 2 of the EIS and in the engineering report for this project. The future mixed motorized use analysis considers many things in determining which routes are appropriate for this use, including safety.
Transportation/General	PCS 049: The Forest Service should consider recognition of the agreement behind the 3- State OHV and National Route Designation decisions which allow continued use of the existing networks of motorized roads and trails without massive motorized closures. (22.98)

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	<b>Response:</b> As per the 2001 Tri-State OHV Decision, if a route was on the ground prior to 2001, it needs to be recognized as existing until a site-specific analysis is complete to determine if it should be incorporated into the National Forest System. This Travel Plan is a site-specific plan that analyzes the various unclassified roads and trails in accordance with the OHV Decision. Please refer to the recreation report for further information.
Transportation/General	<b>PCS 050:</b> The Forest Service should consider an alternative that keeps U-417 as non-motorized and 440/467 and 487 as motorized. Also consider whether there is justification for keeping U-417 in the trail system (even as a non-motorized trail) and the future maintenance costs since it receives very little use. (45.1)
rransportation/General	<b>Response:</b> Alternative 3 includes keeping U-417 non-motorized and 440/467 and 487 motorized. Alternative 3 also includes the decommissioning of U-417 so that it would no longer require maintenance. Alternative 4 includes managing U-417 as a non-motorized trail
	PCS 051: The Forest Service should consider Travel Management Rule and Executive Orders 16644 and 11989 (EOs) to minimize environmental damage when designating routes and comply with the FSM 7710 of minimizing the roads network. (46.3, 46.4)
Transportation/General	<b>Response:</b> This travel management plan has been prepared in the context of the Travel Management Rule, the Forest Service Manual direction on travel management and applicable executive orders. Mitigating resource concerns associated with certain routes and uses was specifically identified as a need for action, as described in chapter 1.
Transportation/Conoral	PCS 052: The Forest Service should consider 1) the enforceability of any new travel plan when adding new roads and trails, 2) a policy of closed unless posted open with appropriate signs so the public and Montana Fish, Wildlife and Parks can help with enforcement, 3) Using MVUM more with the public so they know rules and can comply with them and 4) restricting all motorized use off designated roads, even for hunting. These changes would minimize resource damage. We request the NEPA process document the historic and realistically expected non-compliance of this proposed travel plan and project the effects of expected non- compliance throughout the NEPA resource effects analysis. We request EIS documentation of historical recorded travel plan related motorized violation complaints compared to convictions or bond forfeitures resulting from these complaints. (46.32, 46.44, 58.23, 58.24, 59.2, 127.9, 137.5, 137.16, 137.66, 137.67, 137.68, 235.12, 235.20, 247.70, 247.75, 279.4, 282.4)
Transportation/General	<b>Response:</b> The Helena National Forest has considered your comments and has prepared a range of alternatives to consider for motorized and non-motorized uses. Due to providing compliance with grizzly bear management, roads would continue to be closed with the appropriate mechanism rather than signed open. We recognize that enforcement of the MVUM once complete is important and the Lincoln Ranger District is committed to enforcement as staff and funds allow. Our goal is also to ensure the public has easy access to maps and information so the new travel plan is understandable and implementable. We disagree that the analysis should assume non-compliance; this is not the intent of NEPA. All alternatives restrict motorized use off designated routes and trails, except within 300 feet of a designated for purposes of dispersed camping (alternatives 2 and 3) or for dispersed camping and other recreational uses (alternative 4), provided these uses do not cause resource damage. This is discussed in more detail in chapter 2 of the EIS.

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	We also do not agree the EIS is the correct document to list past motorized vehicle complaints or violations; if this information is desired, please forward your request to the Helena National Forest Freedom of Information Act Coordinator, Jennifer Taylor.
Transportation/General	PCS 053: The Forest Service should consider not adopting any non-system, user-created routes into the route system. These should instead be closed yearlong to motorized use and obliterated to deter illegal use. Unless these routes are reconstructed or mitigated, they can adversely affect watershed or riparian values. Site-specific analysis is needed before these routes are adopted to comply with EO 11644. (46.34, 46.38, 46.97, 46.98, 59.10)
	<b>Response:</b> We analyzed all known routes as part of the development of the alternatives described in the EIS. Known routes included some that were non-system user-created (or unauthorized) routes. Where appropriate, some of these non-system user created routes were added to the mapped system subject to the 2001 Tri-State OHV decision (located in the project record) and have been evaluated as part of the analysis of each alternative. Some of these routes may be retained on the final route decision. When that decision is adopted, the Forest will publish a motor vehicle use map that depicts all designated routes. Routes created by users not on the motor vehicle use map will not be adopted. We did consider your suggestion to not add any of these non-system roads to the route system and this is discussed further in chapter 2 of the EIS; it was not carried forward for detailed analysis.
	<b>PCS 054:</b> The Forest Service should consider minimizing motor vehicle use in the travel plan and balancing this with non-motorized use. Motorized vehicle use can result in adverse impacts to soil, water, wildlife, fish, vegetation, and quiet areas, and can result in safety concerns with other recreationists. The plan should emphasize resource protection. (12.3, 12.5, 13.2, 62.2, 124.4, 137.6, 145.1, 178.6, 229.1, 232.5, 232.6, 259.2, 282.3)
Transportation/General	<b>Response:</b> The range of alternatives presented in the EIS includes a balance between motorized and non-motorized use and resource protection. Chapter 3 of the EIS analyzes the expected effects to all these resources and recognizes that motor vehicle use can have impacts. Alternative 3 was designed to minimize the effects of motorized use upon wildlife and other resources by reducing the miles of motorize routes and limiting the season of use. Alternative 3 and 4 also propose to decommission over 200 miles of road. A more detailed analysis of the impacts of road densities and motorized use will be provided in the elk section of the wildlife report and the EIS.
Transportation/General	PCS 055: The Forest Service should consider providing deference to the private and non-profit organizations that assist with the work to develop and maintain travel corridors when making any adjustments. (66.5)
	<b>Response:</b> The commenter is correct that private and non-profit organizations do play a valuable role as partners assisting with road and trail maintenance. It is unclear what the commenter is referring to in terms of deference being afforded with respect to adjustments.
Transportation/General	PCS 056: The Forest Service should consider making an advisory group made up of recreationists and trustees to make the decisions for techniques and public input for management and consider that the forest is a trustee with the public as a

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	trustor. (66.7, 66.8)
	<b>Response:</b> Establishing an advisory group of trustees to make decisions related to the forest is not a component of this plan. However, we recognize the value of public input and involvement and have used this valuable input in the development of the alternatives described in the EIS.
	PCS 057: The Forest Service should consider potential noise and scenery impacts from any proposed motorized use in proximity to the Alice Creek Historic District and the Lewis and Clark National Historic Trail in the northeastern section of the planning area. (69.2, 69.)
Transportation/General	<b>Response:</b> We agree that there is a potential for noise and scenery impacts to historic properties near the Alice Creek Historic District and Lewis and Clark National Historic Trail. These effects will be further considered through the consultation process with the State and Tribal Historic Preservation Offices and are summarized in the cultural resources report for this project.
	PCS 058: The Forest Service should consider minimizing all off trail activity, both motorized and non-motorized.
Transportation/General	<b>Response:</b> Motor vehicle use off of designated routes would be prohibited under any alternative selected, except within 300 feet of a designated route for purposes of dispersed camping or other recreational use as described in more detail in chapter 2 of the EIS. Non-motorized use off designated routes is not specifically prohibited within the planning area but off-route non-motorized closures could be implemented on a case by case basis, depending on site specific resource or other concerns; these areas would be determined on a site-specific basis as needed during the implementation phase of this project or post post-implementation if any particular resource concerns develop.
Transportation/General	PCS 059: The Forest Service should define the meaning and significance of vehicles less than 50 inches in width. (118.2)  Response: All-terrain Vehicles are defined in the Forest Service Handbook as: A type of off-highway vehicle that travels on three or more low-pressure tires; has handle-bar steering; is less than or equal to 50 inches in width; and has a seat designed to be straddled by the operator (FSH 2309.1805). From this definition the 50 inch width is the maximum width of a
	trail, unless specifically designated otherwise.
	<b>PCS 060:</b> The Forest Service should consider that non-motorized travel off trail is a bigger impact to wildlife than motorized travel on trails. (125.5)
Transportation/General	<b>Response:</b> The wildlife report that is summarized in chapter 3 of the EIS includes an evaluation of the impacts of motorized use and non-motorized use
Transportation/General	PCS 061: The Forest Service should consider adding a trail to the Chinese wall in the Sauerkraut area to the travel plan since timing is right with upcoming stream channel restoration work in this area.

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	<b>Response:</b> Thank you for your comment. This idea has been added to alternative 4. We also are considering an interpretive trail and sign as part of the stream restoration project, which would be a separate analysis and decision.
	PCS 062: The Forest Service should consider changes in the quality and presentation of maps. Maps should display unroaded areas between alternatives and other habitat components important for elk and grizzly bear and be of a scale that is easy to read. (167.5)
Transportation/General	Response: The EIS provides 13 different maps in appendix G to show various aspects of the proposed alternatives. However, we recognize it is difficult to portray all road and trail details at appropriate scales and colors for a project of this size. We will consider the use of different colors or legends for maps in the EIS to ensure the ability to distinguish differences among the alternatives. Maps specific to a resource analysis, such as grizzly bear or roadless areas would not typically be a component of the EIS. These, however, are important components of the analysis summarized in chapter 3 and included in the project record.
	PCS 063: The Forest Service should restrict motorized vehicle use to roads only and designate all trails for non-motorized use only. There are enough routes for motorized use. (174.2)
Transportation/General	<b>Response:</b> This does not meet our purpose and need of the project. The use of motorized trails is legal and an appropriate use of the National Forest. Action alternatives have been provided that look at a reasonable range of both motorized and non-motorized uses while balancing these recreational demands with environmental/biological concerns.
Transportation/General	PCS 064: The Forest Service should consider a fourth alternative that is similar to alternative 3 but includes more consideration of 2 wheeled motorized vehicle access to trails. There is a big difference between a motorcycle trail and a road for cars. (22.123, 176.1)
	<b>Response:</b> Alternative 4 was developed to respond to public comments and additional internal input. It provides over 60 miles of motorized routes, an increase over alternative 1 and alternative 3
	PCS 065: The Forest Service should consider not allowing tracked vehicles (snowmobiles) on closed routes. (231.3)
Transportation/General	<b>Response:</b> The regulation of over the snow vehicles such as snow mobiles is not a component of this proposed plan; we are focusing on non-winter use. Closed trails are designated as closed to motorized use, and thus exclude non-winter use of any motorized vehicles. A separate analysis is on-going for winter use.
T	PCS 066: The Forest Service should prioritize and dedicate the necessary management resources to the project's implementation including on-the-ground recreational management, education and enforcement efforts, weed control, and similar management activities which will be of benefit to the Travel Plan, the public, and the land base. (247.69)
Transportation/General	<b>Response:</b> The project includes design features and monitoring measures that address weeds and reduce adverse effects of project actions on weed spread. The Forest Service recognizes the importance of a thoughtful approach to Travel Plan implementation backed with funding to execute education and enforcement efforts and a host of additional management

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	activities. Implementation of any action alternative will necessarily be a prioritized and coordinated effort due to budget constraints. A section has been added to chapter 2 that describes how maintenance, monitoring and implementation would occur following a decision on this project.
	PCS 067: The Forest Service should consider not using the term illegal road or trail since in the past the public was allowed to drive anywhere. (265.3)
Transportation/General	<b>Response:</b> Unclassified roads and trails are the same as unauthorized, undetermined, and/or user created, the terms are interchangeable. Some specialists might have used the term illegal road or trail; however, it too is interchangeable; the EIS has noted this.
	PCS 068: The transportation section of the EIS should include more discussion of road and trail maintenance and its likelihood over time. Road maintenance is important for reducing sedimentation to streams. The EIS should also include more discussion of the way this necessary maintenance would be funded and implemented, particularly under alternative 2 where more roads and trails would become part of the system. (273.19, 273.20, 273.21, 273.36, 273.40)
Transportation/General	Response: The effects of road maintenance as a tool to reduce sedimentation was analyzed in the Hydrology section of the EIS. The engineering/roads report has been updated to include more discussion of maintenance and this is summarized in chapter 3 of the EIS. Road maintenance funding is allocated to each Forest based on overall roaded land area and recreation visitor use. Forests are given targets for passenger car and high clearance miles of maintenance which must be accomplished with the allocated dollars. Any remaining funding is distributed based on priorities established by Forest managers. Funding available for travel plan enforcement will vary year to year due to variability of allocated federal dollars but initial emphasis will be placed on signing and educating the public, especially on routes that will have management changes from the existing condition. Road and trail conditions vary across the Lincoln Ranger District and are constantly changing. We do not maintain all of our system trails to standard every year due to funding limitations. Some trails receive a higher level of maintenance and at more frequent intervals based on public use. We do make adjustments to maintenance priorities for roads and trails to respond to resource concerns. Establishing the maintenance priority for roads and trails is not part of this particular analysis but would be a step taken during the implementation phase where resource conditions and other factors would be considered. This is discussed in more detail in chapter 2.
Transportation/General	PCS 069: The Forest Service should clarify the following in the transportation section: (1) on page 50 and 51 a more narrative detail on miles of various types of closures and road openings; including more detail on unauthorized routes since currently the better analysis is only in the hydrology section. (2) Clarify how many miles of unauthorized roads there are on the forest since in different sections it mentions 62, 76, and 156. (3) On page 59 there should be a summary of the miles of unauthorized routes to be included on the system as comparison between the alternatives. (4) There should be some discussion of the difficulty and increased cost of maintenance once roads are put into storage and access to complete the maintenance becomes more difficult on some roads since it should be different between the various alternatives. (5) An overall comprehensive plan to complete decommissioning and storage of roads since currently there isn't one. (6) A comparison of the cumulative effects that are different between alternatives. (7) Address clearly why there should be "NO" motor vehicles of any kind when this is mentioned. (273.58, 273.59, 273.65, 273.66, 273.67, 273.68, 282.2)

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	Response: We considered these suggestions as follows:  (1) The descriptions of closures can be found on the first page of appendix C and miles of various closures are described in chapter 2.
	(2) The 62 miles of roads are those that are not previously part of the road or trail inventory (unauthorized routes) that are currently open to public motorized use The 156 miles of unauthorized routes on page 51 refers to all unauthorized routes – not just those currently open. We will check table 19 that refers to 156 miles to ensure this is accurate; if a change is necessary it will be reflected in the EIS.
	(3) Tabular comparisons of all four alternatives are located in the Engineering report, in EIS chapter 2 and in appendix C of the EIS.
	(4) Maintenance is discussed in more detail in chapter 2 of the EIS as in the way in which implementation would occur once a decision is made on this project, including how routes would be prioritized. Roads that are put into storage do not require maintenance while they are in an environmentally neutral storage status so there is no change in the difficulty in performing maintenance between alternatives. At a future time when the road is needed for management, maintenance is then performed to bring the road back up to a serviceable standard.
	(5) A comprehensive plan for decommissioning and storage would be developed during the implementation phase. It would be premature to attempt to establish an effective plan prior to a decision.
	(6) Cumulative effects are considered for each resource as described in chapter 3 and appendix D. A summary of the comparison of effects between alternatives is shown at the end of chapter 2. For transportation, alternative 1 would continue to disperse traffic across the forest. Both alternatives 2 and 3 through the closure of roads would shift the use to different, more concentrated areas of the forest. This would necessarily shift the maintenance requirements to those areas receiving more use.
	(7) Restricting motorized access is proposed in certain areas under all action alternatives and is proposed for a variety of reasons, depending on the particular location. It might be in order to provide for a non-motorized opportunity, to protect an inventoried roadless area, to reduce an impact to a stream or sensitive soil type or to provide for enhanced wildlife security, for example.
Transportation/Roads	<b>PCS 070:</b> The Forest Service should consider that the roads on the SW side of Black Mountain (T14N R10W) can't be legally opened to public motorized use because of the Administrative Use only road easement. (235.14, 266.8, 271.9)
·	<b>Response:</b> Thank you for your comment. The correction has been made reflecting administrative access to the roads on SW side of Black Mountain.
Transportation/Roads	PCS 071: The Forest Service should consider eliminating roads that provide exclusive access to Forest Service land from private lands; eliminate 'out the back door' motorized access from private land holdings. This includes roads in the Huckleberry Pass area (U - 107, U- 109, and U-111 T 15N R10W) and roads on the SW side of Black Mountain in T14N R 10W. (235.13, 247.65)
	<b>Response:</b> The IDT looked very hard at this issue and made an attempt to resolve as many of these situations with the travel plan as possible. However, some of these situations may need to be addressed through a special use permit, which

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	has been noted and will be handled outside of this travel plan process/decision.
Transportation/Roads	PCS 072: The Forest Service should consider keeping roads in T13N, RO7W (e.g. J-4133, 4133, U-4133A, U-4133B, 440, and 1884 and the roads accessed by 1884 and 601) open with no restrictions in order to access private land and patented lodes in this area. These closures would negatively impact the land value as well as compromise the ability to use the land. (125.14, 148.4, 170.4, 170.6)
	<b>Response:</b> Access to private property is determined on a case by case basis. Analysis is performed on all proposed road closures to ensure that reasonable private property access would still available. We considered these specific suggestions as follows:
	U-4133 and U-4133-A would remain open in alternative 2.
	Portions of 440 would remain open seasonally under alternative 2.
	Road 1884 would remain open under all alternatives.
	<b>PCS 073:</b> The Forest Service should remove the allowance of motorized vehicle use within 300 feet of designated routes that is a part of alternatives 2 and 3. This off-road use would result in increased adverse resource effects because these areas would develop into user-created routes over time and Forest Service would not be able to adequately monitor this use to assure resource impacts would not result. A more reasonable approach would be to reduce this to 100 feet or less. (46.12, 49.5, 56.6, 58.17, 72.2, 111.4, 185.4, 199.8, 208.5)
Transportation/Roads	<b>Response:</b> All action alternatives would allow off-road access for camping up to 300 feet from designated routes. And parking within 30 feet of designated routes. Please refer to the EIS for the analysis of access to dispersed activities within 300 feet off a designated route and project design features and best management practices that would be implemented to minimize the potential for adverse resource impacts. The 300 foot designation would be put in place at the discretion of the deciding official and would be documented in the record of decision. The purpose is to provide users with consistent opportunities for access across the forest to minimize user confusion.
	Thank you for your suggestion to use a smaller buffer of 100 feet instead. We considered this suggestion and recognize the concern regarding the need for this use to be monitored and changes implemented if resource damage occurs. This zone is a component of each action alternative in order to provide a reasonable level of access for recreational purposes, and with the implementation of the criteria for resource protection (described in the actions common to all alternatives section), believe that off-route vehicle impacts would be minimized.
	We have observed that, in general, this type of use in the planning area since 2001 has been within acceptable environmental limits. While we do not have a comprehensive survey of this use, cursory monitoring and field checks by various Forest Service resource crews (such as the watershed crew, as documented in (Coleman 2014)) have not resulted in any wide-spread violations or wide-spread resource concerns. Where site-specific issues have arisen, we have been able to address them via site-specific area closures or restrictions. Therefore, we propose to continue this practice under alternatives 1, 2, 3 and 4 and feel that this is consistent with the 2001 Tri-State OHV Decision, the 2005 Travel Planning Rule, Executive Order 11644 (Use of Off-Road Vehicles on Public Lands) and the Forest Plan. We are committed to

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	monitoring and enforcement of this provision (see section of actions common to all alternatives previously in this chapter), and feel that this will ensure routes would not expand in these areas and we would deal with problems if they arise. Providing this buffer zone is consistent with agency policy and other agency travel plans. For these reasons, this alternative was dismissed from further detailed analysis.
	<b>PCS 074:</b> The Forest Service should continue to include the provision for off-road vehicle travel within 300 feet of open roads for access to dispersed camping sites. This provision should ensure that no fording of creeks, streams or other wet areas or new road construction would be allowed in these areas. (54.4)
Transportation/Roads	<b>Response:</b> All action alternatives would allow off-road access for dispersed camping up to 300 feet from designated routes. Please refer to the EIS for the analysis of access to dispersed activities within 300 feet off a designated route and project design features and best management practices that would be implemented to minimize the potential for adverse resource impacts.
Transportation/Roads	PCS 075: The Forest Service should remove the allowance of motorized vehicle use within 300 feet of designated routes that is a part of alternatives 2 and 3. This off-road use would result in increased adverse resource effects because these areas would develop into user-created routes over time and Forest Service would not be able to adequately monitor this use to assure resource impacts would not result. A more reasonable approach would be to reduce this to 100 feet or less. (235.16)
Transportation/Roads	<b>Response:</b> All action alternatives would allow off-road access for dispersed camping up to 300 feet from designated routes. Please refer to the EIS for the analysis of access to dispersed activities within 300 feet off a designated route and project design features and best management practices that would be implemented to minimize the potential for adverse resource impacts. Thank you for your suggestion to use a smaller buffer instead. This was considered and is discussed in more detail in chapter 2 of the EIS
	PCS 076: The Forest Service should consider closing log hauling roads during winter thaw and spring breakup to limit road erosion and sedimentation impacts. The Forest Service should address the rationale for closures in regard to future timber management because it was never addressed. (137.43, 167.42, 195.26)
Transportation/Roads	Response: With the development of the purpose and need for action, sideboards used to develop the proposed action (EIS) and subsequent action alternatives, the long-term status of all routes and prescribed closure methods were evaluated. This included continued access for resource management needs, open roads and appropriate storage methods on closed roads that were determined to be needed for long term timber management. All action alternatives assume all roads proposed for storage would be stored at the 3-S level. This level includes re-contouring at intersections (obliterate the road entrance and add rock/earth barriers as needed. It also would include waterbars, remove corrugated metal pipes (CMPs or culverts) and restore watercourse, ditch relief pipes, scarify and seed. These closure methods would not preclude any future timber management as the major investment of the road prism would remain in place.
Transportation/Roads	PCS 077: The forest should not close any road that is already open to motorized use in order to be in compliance Montana Law and its Constitution. All existing roads must remain open to provide continued access to the forest. Consider, in

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	particular, the road at the top of Stemple toward Fletcher should remain open. Motorized use keeps trails open for all users. (66.2, 128.11, 159.6, 161.10, 214.6, 268.21, 268.86)
	<b>Response:</b> The Forest Service is mandated in the 2012 Planning Rule to perform travel management analysis. Travel Plans determine the open vs. closed status of roads as well as season of use to best protect resources. Access to the Forest is an important issue and will continue with this Travel Plan, although it may shift in some areas. The Tri-State OHV decision requires that unauthorized routes be considered open only until they have been analyzed under a Transportation Planning Process at which time they can be closed if they are determined to not be necessary for management or should be closed due to potential resource damage. The CDNST (route 440) from Stemple to Flesher is proposed for motorized use in alternative 2.
	PCS 078: We support Alternative 3 because it proposes the most decommissioning and road closures and would result in the most sediment reduction of the three alternatives. The Forest Service should also consider additional decommissioning where it would improve fisheries and other aquatic resources, reduce sediment to streams, reduce the need for expensive road upgrades, and where there is already legal access to the area. Specific roads to consider for decommissioning to meet these criteria include U431, U433, U103, U416, U417, U444, U771-A2, 1806, U-111, and 4106A1. Focus decommissioning on Alice, Arrastra, Beaver, Anaconda, Willow, Poorman, Sauerkraut, and Upper Blackfoot watersheds. If U-431 is open consider a bridge to address sedimentation. (48.5, 247.29, 273.15, 273.129, 273.130, 273.131, 273.132, 273.133, 273.135, 273.136)
Transportation/Roads	<b>Response:</b> Thank you for your support of alternative 3 and your suggested modifications. We recognize the value of decommissioning for sediment reduction and have proposed decommissioning within the action alternatives where needed to minimize these effects. At this time for the action alternatives for this project, the preferred treatment for road decommissioning is to install waterbars, outslope or selectively re-contour the road, subsoil the road surface 12-18 inches, seed and fertilize if needed and scatter slash on slopes. This effort would encourage infiltration and re-vegetation of the road surface, prevent erosion, and encourage eventual recovery of soil productivity through natural site recovery. Decommissioning roads would be moderately effective at restoring soil productivity over the short term (< 10 years) on about 12 acres for alternative 2 and 284 acres for alternative 3. Eventually over the long term (> 10 years) full soil productivity would be restored on decommissioned roads.
	We have considered your suggestions for road decommissioning of specific roads as follows:
	U-431 – proposed for decommissioning in Alternative 3 and 4
	U-433 – Proposed for decommissioning in Alternative 3 and 4
	U-103 – Proposed for decommissioning in Alternative 3 and 4
	<ul> <li>U-416 – Proposed for closure in Alternative 2 and decommissioning in Alternatives 3 and 4</li> </ul>
	U-417 – Proposed for decommissioning in Alternative 3 and 4

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	U-444 – Proposed for closure in Alternative 2 and decommissioning in Alternatives 3 and 4
	<ul> <li>U-771-A2 is not a recognized route; Route 771-A2 is proposed for decommissioning in Alternatives 3 and 4</li> </ul>
	<ul> <li>U-771-A1 – Part of this route is proposed for non-motorized travel in alternatives 3 and 4; it was not proposed for decommissioning it was not necessary in order to retain in for non-motorized use</li> </ul>
	<ul> <li>1806 - Part of this road is naturally reclaimed in Alternatives 1 and 2 and is proposed for decommissioning in alternatives 3 and 4. The other part is open to highway legal vehicles in all alternatives.</li> </ul>
	U-111- Proposed for decommissioning in Alternative 3 and 4
	<ul> <li>4106-A1 – Has already been reclaimed and is proposed for decommissioning in Alternatives 3 and 4</li> </ul>
	<ul> <li>Decommissioning in these suggested watersheds is a component of alternative 3.</li> </ul>
	PCS 079: The Forest Service should consider reducing road density by closing or decommissioning routes and removing road stream crossings when needed to improve wildlife habitat connectivity and wildlife security and aquatic habitat quality. Consider restoring natural contours and revegetating with native seed when implementing closures. (48.6, 137.50, 137.51, 152.6, 152.7, 247.33)
Transportation/Roads	<b>Response:</b> We recognize the value of decommissioning for sediment reduction and wildlife habitat improvements and have proposed decommissioning within the action alternatives where needed to minimize these effects. Alternative 4 proposes the highest level of road decommissioning among the alternatives, would result in the fewest designated routes on the MVUM and is the agency's preferred alternative. Regarding closure methods: If the road is determined to be needed in 30-50 years, a less aggressive (storage) method would be used (pull pipes, light rip & seed) with entrance obliteration. If the road is determined to not be needed and the road is re-vegetated with large trees, then total recontouring may not be required through risk analysis.
	<b>PCS 080:</b> The Forest Service should consider prioritizing roads for storage over decommissioning in order to maintain options for future resource and land management where appropriate. (152.3)
Transportation/Roads	<b>Response:</b> With the development of the proposed action and subsequent action alternatives, the long-term status of all routes and prescribed closure methods were evaluated. This included continued access for resource management needs, open roads and appropriate storage methods on closed roads that were determined to be needed for long term timber management.
Transportation/Roads	PCS 081: The Forest Service should consider designating the USFS road that connects Patterson Prairie Road and the Arrastra Creek Road and Stemple Pass area roads as an "EMERGENCY FIRE EGRESS" to create an escape route during fire emergencies for safety and because of the difficulty in fighting and controlling wild fires without adequate road access. Also consider keeping roads in the T13N, R7W area open for future fire management needs and recognize the need for future access in all areas when wildfires occur, such as the Davis 5 prescribed fire. (109.1, 125.9, 125.18, 125.20, 125.24, 128.4, 148.7, 170.3, 246.3)
	Response: Thank you for this suggestion. We are currently working on this issue of ensuring appropriate access for fire

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	management, fire emergencies and public safety through a separate special use permit with landowners in this area. Road storage is only proposed where there is no anticipated need for the route in the near term. Fire access was only one aspect considered when determining which routes should be put in storage without negatively impacting the ability to manage the forest. A portion of route U-66 is proposed for storage under alternative 2 but no other alternatives propose storage for this route. This U-66 route would remain closed to motorized use under alternatives 3 and 4 but not stored or decommissioned. Access to this area is also provided via state land and BLM land.
	<b>PCS 082:</b> The Forest Service should prioritize the roads proposed for storage or decommissioning. Highest priorities for road restoration should be those that would improve habitat conditions for aquatic and terrestrial species, and improve landscape connectivity for wildlife travel corridors. (227.13)
Transportation/Roads	<b>Response:</b> This was considered in project planning and discussed in the Aquatic Species and Habitat analysis. Where there is a projected future need for the route the route is proposed for storage. Where there is clearly no need for the route for management and/or there is a potential for resource damage, the route was proposed for decommissioning. The type of storage and/or level of decommissioning would be determined on a case by case basis; for purposes of this analysis, we made assumptions regarding the level of storage and decommissioning as described in chapter 2. Closure, storage and decommissioning priorities would be established as part of the implementation plan for this project, following a decision. Routes would be prioritized in part based on resource needs/concerns. This process is discussed briefly in chapter 2.
	PCS 083: The Forest Service should consider retaining only the most essential roads and trails to minimize the road and trail network as discussed in FSM 7710.13. (46.1)
Transportation/Roads	<b>Response:</b> This objective of this analysis is to identify the transportation system necessary for management of the Helena National Forest. The IDT analyzed the effects of each alternative utilizing the best available scientific information and by following laws, policies, and procedures that are in place.
	PCS 084: The Forest Service should consider removing routes from the travel system that have already been reclaimed; this is apparent in alternative 3. (247.42)
Transportation/Roads	<b>Response:</b> Thank you for your comment. This objective of this analysis is to identify the transportation system necessary for management of the Helena National Forest. Once a route has been determined to be not needed and identified as either naturally reclaimed or has received the additional required treatment for closure, the route status would be changed accordingly in the inventory which will, in turn, be reflected on an updated MVUM
Transportation/Roads	PCS 085: The Forest Service should consider that Continental Divide roads 440 and 1884 are part of the permanent National Forest transportation system. (148.6)
	Response: Thank you for your comment.
Transportation/Roads	PCS 086: The Forest Service should consider closing roads by route obliteration as the preferred method instead of gates because it is the most effective method for protecting public lands. (137.51)

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	<b>Response:</b> We agree that route obliteration is a more effective closure method than gates. At this time for alternatives 2 and 3 of this project, the preferred treatment for road decommissioning is to install waterbars, outlsope, or selectively re-contour the roads, subsoil the road surface 12-18 inches, seed and fertilize if needed and scatter slash on slopes. This effort would encourage infiltration and re-vegetation of the road surface, prevent erosion, and encourage eventual recovery of soil productivity through natural site recovery. Decommissioning roads will be moderately effective at restoring soil productivity over the short term (< 10 years) on about 12 acres for alternative 2 and 284 acres for alternative 3. Eventually over the long term (> 10 years) full soil productivity will restored on decommissioned roads. Gates may be used in certain situations where appropriate.
	PCS 087: The Forest service should consider keeping motorized access to mining claims open as intended by US Congress, particularly in the T13N, R7W area where there are multiple mining claims. (125.4, 125.6, 125.15)
Transportation/Roads	<b>Response:</b> The purpose and need for this project, found on page 6 of the EIS, is to provide a manageable system of designated motorized travel routes. Access to unpatented mining claims is provided for through submittal and evaluation of a mineral Plan of Operations in the case of a closed road or an area where no access currently exists. The impacts to mineral operators of having to submit a Plan of Operations where a formerly open road becomes closed in a selected travel alternative is described in the EIS on pages 108-118.
	<b>PCS 088:</b> The Forest Service should consider minimizing motorized vehicle use off legal routes because there are no provisions in the plan to assure the rules are followed, resource damage, and of the additional costs involved. (149.1, 231.2, 235.17, 240.7, 243.1, 253.2, 253.4, 267.5, 271.4)
Transportation/Roads	Response: This objective of this analysis is to identify the transportation system necessary for management of the Helena National Forest. Impact to resources is just one aspect of consideration. Off route travel violations are enforced by Forest Service law enforcement. Project design features and best management practices have been developed to minimize effects to resources from this use, as described in chapter 2 of the EIS
Transportation/Roads	PCS 089: The Forest Service should consider not incorporating unauthorized routes into the forest transportation system because off the message it would send to the public that this is an acceptable practice. If unauthorized routes are incorporated, the decision needs to clearly state the rationale for this. (247.43)
	<b>Response:</b> This was considered and is described in chapter 2 of the EIS, but was dismissed from further analysis. As per the 2001 Tri-State OHV Decision, if a route was on the ground prior to 2001, it needs to be recognized as existing until a site-specific analysis is complete to determine if it should be incorporated into the National Forest System. This Travel Plan is a site-specific plan that analyzes the various unclassified roads and trails in accordance with the OHV Decision. Please refer to the recreation and engineering reports for further information.
Transportation/Roads	PCS 090: The Forest Service should clarify in the EIS that the Interagency Grizzly Bear Committee (IGBC) criteria for roads requires that gated roads count as open roads because these provide for administrative use. The EIS should be clear in

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	stating that only roads with physical barriers like obliteration are considered closed per the IGBC. (167.36, 195.19, 195.20)
	Response: The IGBC criteria evaluates both open road densities and total road densities. Roads meeting the criteria for "restricted" do not have to be counted in the open road density calculation but may be counted in the total road calculation if they do not meet the criteria for a "reclaimed road". The IGBC criteria define a restricted road" as: A road on which motorized vehicle use is restricted seasonally or yearlong. The road requires effective physical obstruction (generally gated)* (IGBC, 1998). A "reclaimed road" is defined as: A route which is managed with the long term intent for no motorized use, and has been treated in such a manner so as to no longer function as a road. An effective means to accomplish this is through one or a combination of several means including: recontouring to original slope, placement of logging or forest debris, planting of shrubs or trees, etc. (IGBC, 1998). *Motorized administrative use by personnel of resource management agencies is acceptable at low intensity levels as defined in existing cumulative effects analysis models. This includes contractors and permittees in addition to agency employees (IGBC, 1998).
	PCS 091: The Forest Service should consider the benefits of closing routes to improve wildlife habitat connectivity and wildlife security. The EIS should be more clear as to the rationale for closing routes in some areas while not closing them in other areas. For example, we do not support opening road 4106-J2 or U-066 in order to protect grizzly bear habitat. (167.1, 195.1, 195.2, 195.3, 195.27, 247.10, 247.26)
Transportation/Roads	
	<b>Response:</b> Various route closures have been considered to address wildlife concerns and other resources. The rationale for route designations is summarized in the EIS and provided in more detail in the project file once completed. A portion of route U-66 is proposed for storage under alternative 2. This U-66 route would remain closed to motorized use under alternatives 3 and 4. Route 4106-J2 would be closed to motorized use under alternatives 1, 3 and 4.
	PCS 092: The Forest Service should provide opportunities for recreationists to access dispersed camping locations away from roads in scenic environments; these should not be restricted to within 300 feet of an open road. If there are site-specific resource concerns with a certain historic camp site, it could be signed closed. (66.11)
Transportation/Roads	<b>Response:</b> The objective of this analysis is to identify the transportation system necessary for management of the Helena National Forest. The IDT analyzed travel up to 300' off designated routes to camp. Please refer to the EIS for the full analysis. We agree that some historically used dispersed sites are greater than 300 feet from roads and these are identified and proposed to stay open in alternative 4, as discussed in more detail in chapter 2
	PCS 093: The Forest Service should consider leaving roads open to allow recreational and mining access as long as the roads do not have negative impacts to wildlife or the environment. (104.6, 104.8, 128.2, 214.1)
Transportation/Roads	<b>Response:</b> The suite of alternatives presented in the EIS suggest various options for managing roads while trying to balance recreational uses of the Forest with other resource requirements. Various studies have shown that open road densities can impact wildlife although the impacts may vary among individuals or species. Within the wildlife report the big game and grizzly bear sections in particular address the effects of open road densities upon these species. Both elk and grizzly have management direction specific to open road densities.

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Transportation/Roads	PCS 094: The Forest Service should consider keeping roads open for motorized recreational use and establishing interconnected loop trails where feasible. For example, the area south of Highway 200 in the Rochester Gulch area would provide a suitable loop trail for motorcycles. (180.12, 180.13, 246.4)
	<b>Response:</b> The suite of alternatives presented in the EIS suggest various options for managing roads while trying to balance recreational uses of the Forest with other resource requirements. Numerous loop opportunities are identified in Alternative 4, but a motorized loop route has not been brought forward in the Rochester Gulch area due to resource and private property concerns.
	PCS 095: The Forest Service should consider the impacts of off road use to back country recreation and keep vehicles on roads; no off-road motor vehicle use should be permitted. (133.2, 214.4)
Transportation/Roads	<b>Response:</b> Off-road vehicle use is not permitted in any of the alternatives, except within 300 feet of a designated route in order to access a dispersed camping area (alternatives 2 and 3) or for camping or other recreational access needs (alternative 4).
Transportation/Roads	PCS 096: The Forest Service should address in the EIS/Travel plan whether the road will be adequately maintained as there is a current backlog for road maintenance and funding creating degraded road conditions. The Forest Service should include the maintenance needs log as part of the project record. The Forest Service should ensure that the remaining roads are adequately inspected and maintained and that road and trail networks should be limited to those that can be adequately maintained; and if not, then decommissioned. The EIS analysis should include effects of not properly maintaining roads on sedimentation to streams. The Forest Service should avoid blading unpaved roads in a manner that contributes to road erosion and sediment transport to streams and wetlands. (137.3, 137.12, 273.60, 273.61, 273.62)
	Response: This objective of this analysis is to identify the transportation system necessary for management of the Helena National Forest. Resource protection is one area of consideration in the development of this process. Road maintenance funding is allocated to each Forest based on overall roaded land area and recreation visitor use. Forests are given targets for passenger car and high clearance miles of maintenance which must be accomplished with the allocated dollars. Any remaining funding is distributed based on priorities established by Forest managers. Funding available for travel plan enforcement will vary year to year due to variability of allocated federal dollars but initial emphasis will be placed on signing and educating the public, especially on routes that will have management changes from the existing condition. Road and trail conditions vary across the Lincoln Ranger District and are constantly changing. We do not maintain all of our system trails to standard every year due to funding limitations. Some trails receive a higher level of maintenance and at more frequent intervals based on public use. We do make adjustments to maintenance priorities for roads and trails to respond to resource concerns. Establishing the maintenance priority for roads and trails is not part of this particular analysis but would be a step taken during the implementation phase where resource conditions and other factors would be considered.
	Chapter 2 includes more detail on maintenance, monitoring and implementation.

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Transportation/Roads	PCS 097: The Forest Service should consider the impacts of roads on fisheries and hydrology and the amount of sedimentation affecting stream flow. The Forest Service should consider removing roads within 150 feet of streams and reclaiming steam crossings for bull trout drainage. The Forest Service should consider removing culverts that are negatively affecting stream flow in both stored and decommissioned roads. (95.4, 247.28, 273.14)
	<b>Response:</b> These suggestions were considered and are reflected in the aquatic habitat report that is summarized in chapter 3. We have considered these suggested design features and those that were appropriate to this analysis have been added to this section of chapter 2 of the EIS. Current road design practices implemented on the Forest include these recommendations from the EPA. Structures are typically placed outside the stream channel and stream restoration is routinely a part of any construction-related project. Examples of recent projects where these design features were used include East Fork Willow Creek, West Fork Willow Creek, Nevada-Ogden Bridge, Klondike Creek, Snowbank Creek, Fields Gulch 2, Poorman Creek, and 2 structures on South Fork Poorman Creek.
	<b>PCS 098:</b> The Forest Service should provide adequate parking and turn around areas if a road is gated or closed. The Forest Service should consider providing parking spots within 30 feet of legal routes for hiking and camping access to reduce driving off legal routes. (66.10, 108.1)
Transportation/Roads	<b>Response:</b> The objective of this analysis is to identify the transportation system necessary for management of the Helena National Forest. Designating parking and turn-around areas was not part of the scope of this project; however, will be taken into consideration during the implementation period when gates are installed. Parking within 30 feet of legal routes is a component of alternatives 2 and 3 and alternative 4 includes parking for legal recreational activities within 300 feet of designated routes.
	PCS 099: The Forest Service should consider not opening any currently gated-closed or overgrown roads, such as 107, U-109, and U-111 in T15N, R10W. (266.7, 271.8)
Transportation/Roads	<b>Response:</b> The Forest Service considered the status of all roads in the planning area during the planning process and evaluated the necessity of each to the road system. All of these roads are proposed for decommissioning in alternative 3 and 4.
Transportation/Roads	PCS 100: The Forest Service should consider routes with shared use for hikers, horses, and motorized vehicles less than 50 inches in width; there are no findings that horsemen and hikers cannot use the same roadway as vehicles less than 50". The Forest Service should consider keeping all roads open for motorized use and with shared uses. The Forest Service should consider dual use of existing roads for legal highway vehicles and OHVs and not open dedicated OHV trails into remote areas due to impacts to wildlife. (125.10, 179.3, 180.14, 214.5, 247.51, 248.4, 268.65)
	<b>Response:</b> The Helena National Forest has considered your comments and has prepared a range of alternatives to consider for motorized and non-motorized uses. Alternative 1 reflects the existing condition. Three action alternatives have been provided that look at a varied range of both motorized and non-motorized uses while balancing these recreational demands with environmental/biological concerns. The impacts to wildlife associated with dedicated OHV routes into remote

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	areas are addressed in various sections of the wildlife report. Different seasonal restriction area proposed for remote areas to minimize potential effects upon wildlife. Motorized mixed use evaluations would take place as part of a separate analysis by the Forest Engineer, during the implementation phase of this project.
	<b>PCS 101:</b> The Forest Service should list the sediment reduction on Table 6 (page 44) separately for stored roads and decommissioned roads, and ensure that the sediment projections correspond to the amount of crossings removed and the miles of road within 150 feet of streams that are decommissioned. (273.56)
Transportation/Roads	<b>Response:</b> The amount of sediment reductions as a result of decommissioning for each alternative is presented in the Hydrology section of the EIS. Table 6 represents those values for sediment reductions as a result of road decommissioning, not storage. Comment was considered in the Hydrology report for the EIS. The effects of the project on soils is described in the soil section of the EIS.
Transportation/Roads	PCS 102: The Forest Service should consider decommissioning redundant, non-arterial routes and dead-end spurs to maintain and improve wildlife security and habitat, reduce road density, and reduce illegal motorized use. (235.8, 247.3, 247.34, 247.52, 247.54)
	<b>Response:</b> The Forest Service did consider decommissioning roads and spurs to improve wildlife security and reduce road density. The road patterns proposed in the action alternatives are the result of this process.
Transportation/Roads	<b>PCS 103:</b> The Forest Service should consider the major impact to streams from erosion and sediment from roads and close those roads creating these issues. The Forest Service should consider that the discussion of sediment delivery is not accurate as part of the cumulative effects. (110.2, 137.11, 137.38, 273.42)
Transportation/Roads	<b>Response:</b> The effects of the project on soils and hydrology are described in specialist reports in the project and summarized in chapter 3 of the EIS. Erosion and sediment were considered as both direct/indirect effects and cumulative effects.
	PCS 104: The Forest Service should consider EPA's recommendation regarding roads. The Forest Service should clarify if there was a change intended for the unlabeled orange-yellow route in T12N R07W S9. The Forest Service should consider closing section 3 of Route 1827 to improve the natural and scenic beauty and hunting opportunities. (.37.41, 247.47, 247.55)
Transportation/Roads	<b>Response:</b> Thank you for these suggestions. We have considered these suggested EPA design features and those that were appropriate to this analysis have been added to this section of chapter 2 of the EIS. The Forest Service is not required to follow EPA guidelines but current road design practices implemented on the Forest include many of these recommendations from the EPA. Structures are typically placed outside the stream channel and stream restoration is routinely a part of any construction-related project. Examples of recent projects where these design features were used include East Fork Willow Creek, West Fork Willow Creek, Nevada-Ogden Bridge, Klondike Creek, Snowbank Creek, Fields Gulch 2, Poorman Creek, and 2 structures on South Fork Poorman Creek.

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	Route 485-D1 is proposed as open highway legal in alternative 1 and as part of the CDNST in alternatives 2 and 3 in order to provide access to a trailhead. We are unclear about your reference to 'section 3' of Route 1827 but approximately 2.5 miles of it are proposed for decommissioning in alternative 3 and 4 and about 4 miles of it are proposed for some form of seasonal closure to motorized use in all action alternatives.
	PCS 105: The Forest Service should ensure that sound science, spatial analysis, and aggressive management tools are utilized in designing a transportation plan. The Forest Service should consider project design and mitigation measures for new non-motorized and motorized trails in planning and construction to avoid sensitive areas. The Forest Service should consider reviewing the training videos available from the Forest Service San Dimas Technology and Development Center. The Forest Service needs to ensure that 36 CFR 212.5 is followed which calls for a science-based analysis and involvement form interested and affected citizens; landowner need to be contacted. (125.21, 125.25, 137.45, 137.54, 227.1)
Transportation/Roads	Response: The objective of this analysis is to identify the transportation system necessary for management of the Helena National Forest. Impact to resources is one aspect of consideration. Tools used to inform this analysis include input from specialists, previous science-based analysis including the RAP as well as current GIS information. New roads and trails will be areas where land would be withdrawn from soil productive use, and dedicated to transportation use. For the soils analysis for this project, an examination was made of soils and effects for the travel plan. Sensitive soils are found on 24 landtypes that are prone to landslides, slumps, wet soils and flooding, and soils that are vulnerable to compaction and erosion as a result of moisture content, parent material, and slope on the Helena National Forest. Routes on these soils were identified and practices are recommended to reduce risks to soils. Project design features and best management practices would be implemented and are described in chapter 2 of the EIS. We thank you for your suggestion regarding the SAFETEA-LU videos available through the San Dimas website. Those videos are available to all Forest Service employees for review as needed.
Transportation/Roads	PCS 106: The Forest Service should consider closing and gating Cotter Creek road until the crossings of the tributaries can be upgraded. The Forest Service should consider a compromise between Alternative 2 and Alternative 3 with respect to seasonal road closures in order to balance motorized recreational access while addressing the needs of wildlife habitat security. The Forest Service should consider minimizing travel off legal routes for camping; and preventing any motorized vehicle traffic including tracked vehicles on closed roads. (52.8, 152.8, 273.128,)  Response: We considered this suggestion and it is a part of alternative 4; Cotter Creek Road (330-B1) would be closed to
	wheeled vehicles yearlong in alternative 4 but it is proposed to remain open in alternatives 2 and 3.
	<b>PCS 107:</b> The Forest Service should consider routine inspections and evaluations to identify impacts and conditions of roads that may cause or contribute to sediment and correct as many of these conditions and sources as possible. (137.44, 137.50)
Transportation/Roads	<b>Response:</b> Road-stream crossings and road density issues are addressed in the hydrology section of the EIS. This was considered in project planning and discussed in the Aquatic Species and Habitat analysis. Annually the forest is required by the Washington Office to complete condition surveys on a random sample of roads. In addition to those condition surveys,

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	forest service personnel who are using routes on a daily basis report maintenance issues. Targets are given to the forest to complete maintenance on high use roads, the remaining funds are distributed using priorities set forth by the line officers and the engineering staff. Through project work additional funds can be utilized to complete maintenance on routes causing or with the potential to cause resource damage.
	PCS 108: The Forest Service should include information in the roads section that pertains to INFISH standards, as these standards directly relate to road management. (273.46)
Transportation/Roads	Response: INFISH standards are a component of the Helena Forest Plan and we discuss compliance with these standards in appendix A of the EIS. Road management is specifically discussed and addressed according to these standards in appendix A. INFISH standards were also used in the development of project design features listed in chapter 2 and were considered during the development of alternatives for this project. These standards are included more fully in the aquatic species and habitat section of chapter 3. We will review the roads section of the EIS to determine if any additional reference or discussion of INFISH standards would strengthen this analysis.
Transportation/Motorized Trails	PCS 109: The Forest Service should consider adding and keeping single track motorcycle trails to include Stemple to Flesher Trail #440 along the Continental Divide. The Forest Service should consider designating all existing single track trails on multiple-use lands within the project area open to motorcycle use. Ensure trail 418 remains open. Consider a single track up Ethel and Long Gulch over to Baldy and Crater Mountain. The Forest Service should consider adding single track trails for expert riders. (22.58, 22.59, 22.124, 87.5, 87.6, 90.4, 95.3, 100.2, 100.3, 118.8, 128.10, 135.2, 161.9, 161.12, 161.31, 179.1, 179.4, 180.11, 180.15, 180.20, 186.1, 186.3, 191.4, 204.1, 211.6, 233.1, 239.5, 254.1, 268.7, 268.8, 268.9, 265.45, 270.1, 270.2)
	Response: We considered these suggestions for single track trails and confirmed that all reasonable access for motorcycle trails are included in alternative 2, while still balancing the needs for elk security and other environmental/biological concerns with recreational demands. Elk security concerns are discussed in chapter 3. The three action alternatives developed for this project provide a varied range of both two-track and single-track motorized trails while balancing these recreational demands with environmental/biological concerns. Both alternatives 1 and 2 provide for single track motorized use on Trail 418 from Stonewall to Sucker Creek. This is a long trail that crosses over a ridge system and the intent of proposed non-motorized use on portions on this trail is to reduce the impacts of motorized use to elk security on the sections further form town. Alternatives 3 and 4 propose non-motorized use.
Transportation/Motorized Trails	PCS 110: The Forest Service should address safety and consider developing motorized loop trails and connector trails between designated motorized trail systems and evaluate opportunities as part of the planning process. Providing adequate connections would minimize illegal trials and create a better riding experience. For example, consider motorized loop trails in the Dalton to Ogden 404 and 401 areas, Lincoln Gulch, Long Point Gulch, Hogum area, Lincoln Cemetery road, 1-2-3 Gulches, Keep Kool lakes, Mike Horse Gulch, Beaver Creek to Alice Creek, Cadotte Creek and 1841J1 to 1841D1. Keep the Sand Bar connector route as proposed in alternative 3 but with no seasonal restrictions. The Forest Service should consider and develop youth trails that offer an alternative to unauthorized routes. The Forest Service should consider opening motorized trails year round with seasonal restrictions during hunting season. The Forest Service should consider designating forest roads to allow OHV travel and list the locations in the Travel Plan. (22.44, 22.47, 90.3, 90.5, 90.6, 90.7,

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	90.8, 128.8, 128.9, 128.13, 135.2, 135.3, 140.1, 140.2, 140.3, 159.4, 159.5, 159.7, 159.8, 159.9, 159.10, 161.5, 161.6, 161.7, 161.8, 161.13, 161.14, 161.15, 161.16, 161.19, 169.2, 180.17, 080.18, 180.21, 090.1, 191.2, 198.3, 198.6, 207.2, 209.2, 239.2, 239.16, 246.6, 247.71, 247.72, 247.73, 257.1, 268.24, 276.4)
	Response: We have worked very closely with the motorized community to provide loop opportunities in the areas mentioned, some of which requires new motorized trail construction to provide these loops. These loop opportunities are provided for in alternatives 2, 3, and 4; however to a larger degree in alternatives 2 and 4. We have also looked at seasonal closures for these routes versus being open year round and also have different closure dates reflected in the alternatives. Seasonal restrictions in some cases are necessary due to elk security needs or other wildlife/resource conditions that warrant it. The seasonal restrictions are for hunting season beginning either 9/1 or 10/15. Youth opportunities are found in the action alternatives in the Mikehorse area as well as the 1st, 2nd, and 3rd Gulch areas, some of which are forest roads that would be designated as motorized trails.
Transportation/Motorized Trails	PCS 111: The Forest Service should consider adding culverts, pipes or logs where water crossings would reduce the environmental impacts and resource damage to ensure motorized trail access. The Forest Service should consider having motorized users donate time and funds for maintenance of motorized trails. The Forest Service should consider the cost of a new motorized trail project and decommissioning trails verses the use of those funds for maintenance of motorized trails. The Forest Service should consider maintaining the trail system instead of restricting it. (22.20, 22.21, 22.41, 103.4, 124.5, 144.2, 144.3, 268.14, 268.15)
	<b>Response:</b> The effects of the project on soils and hydrology are described in chapter 3 of the EIS. All new water crossings would be designed to minimize impacts to stream channels and riparian areas. With a decision on the travel plan and the inclusion of a motorized trail system, the Helena NF will work together with motorized trail organizations that have already joined us in partnership in the future management, maintenance, and education of this system. The respective costs of road/trail maintenance and decommissioning are described in the economics section of the EIS.
Transportation/Motorized Trails	PCS 112: The Forest Service should consider addressing concerns that the 3 alternative maps are confusing and difficult to understand. The Forest Service should consider providing clear and concise route mapping in order to clarify designated trail use, vehicle width restrictions and any seasonal closures. (135.2, 161.7, 247.74)
	<b>Response:</b> The EIS provides 13 different maps in appendix G to show various aspects of the proposed alternatives. However, we recognize it is difficult to portray all road and trail details at appropriate scales and colors for a project of this size. We will consider the use of different colors or legends for maps in the EIS to ensure the ability to distinguish differences among the alternatives.
Transportation/Motorized Trails	PCS 113: The Forest Service should consider that by retaining motorized use and access, there is no need for a change in elk cover standards to assure appropriate compliance with the existing Forest Plan. The Forest Service should consider making motorized access available May 16 -October 15 with elk calving and bow hunting restrictions applied only where they make sense. Also consider other variations in motorized access availability such as May 1st or May 15th through December 1 or May 1st or May 15th through September 1. The Forest Service should consider keeping motorized access

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	open to trail 467 because old and new elk density standards are complied with in the area. (135.2)
	Response: The elk section of the wildlife report provides a detailed discussion of the existing Forest Plan standards for elk, compliance with the standards for each alternative including the existing condition or no action alternative, and the rationale for consideration of changing the methodology of addressing elk security. Proposed dates for motorized routes consider protecting areas of concentrated elk calving, and to provide for hunter opportunity while considering Montana Fish Wildlife and Parks' harvest objectives. Forest Plan standards compliance and security thresholds for elk are determined for each elk herd unit, two of which are directly influenced by trail 467. Although one herd unit is in compliance with the existing FP standard, the other is out of compliance.
	Alternatives 2 and 4 include providing motorized access during the dates suggested (May 16 – October 15) and keeping trail 467 open to motorized use. Other seasonal dates were considered and are discussed in chapter 2.
Transportation/Motorized Trails	PCS 114: The Forest Service should consider that elk need security to survive and these areas should be closed to motorized use. (264.1)
	<b>Response:</b> Elk security is addressed in the elk section of the wildlife report and includes security both during and outside the hunting season.
Transportation/Motorized Trails	PCS 115: The Forest Service should consider multiple uses of trails in the planning area instead of closing, storing, or decommissioning trails and consider that shared trails meet more users' needs while bringing business to the local community. The Forest Service should consider that shared use of trails better meet the guidelines of the National Trail Systems Act for innovative solutions. The Forest Service should consider that motorized recreationists support the use of mountain bikes on single track trails. (22.60, 92.3, 92.4, 161.32, 268.16)
	Response: We recognize that there are opportunities for hikers, equestrians, and mountain bike riders to utilize motorized trails and to share these designated motorized trails. Trails designated for non-motorized use however, are typically not wide enough or designed with the appropriate criteria to safely provide access for ATVs. It is possible that some non-motorized trails could accommodate motorcycles in some situations. However, proposals for converting motorized trails to non-motorized trails were developed in many cases to provide enhanced wildlife security, protect soil and water resources, or provide specific quiet recreational opportunities; in these cases motorized users would be restricted from utilizing any trail designated specifically for non-motorized use. Opportunities for motorized trail use are part of all alternatives. The newly developed alternative 4 includes additional motorized trail opportunities through road to trail conversion and new trail construction. The only trail in the planning area that is named in the National Trails Systems Act is the CDNST and this trail is addressed in each alternative, with both motorized and non-motorized sections, consistent with the 2009 CDNST Comprehensive Plan and with this Act.
Transportation/Motorized Trails	<b>PCS 116:</b> The Forest Service should consider that the multiple use land managed by the Forest Service provides a significant source of OHV recreational opportunities and because of the shortage of these routes, every existing motorized route is important to preserve. The Forest Service should consider the public's great need for OHV recreation opportunities.

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	The Forest Service should consider evaluating and addressing that motorized access is limited as shown by the miles of roads verses the miles of motorized trails and is inadequate for the numbers of OHV recreationists. The Forest Service should consider an adequate quantity and quality of motorized trails equal to the quantity and qualities of non-motorized trails and provide trails for different experience levels. The Forest Service should use other Forest Service OHV trail systems as a guide. (22.1, 22.13, 22.14, 22.15, 22.16, 22.50, 22.55, 22.82, 22.97, 22.109, 22.135, 51.2, 51.5, 161.1, 268.1, 276.1)
	<b>Response:</b> Three action alternatives have been provided that look at a reasonable range of both motorized and non-motorized uses while balancing these recreational demands with environmental/biological concerns. The Helena NF has worked collaboratively with user groups and the communities to consider alternatives that provide for a high quality trail system for multiple uses. The recreation section of chapter 3 discusses effects to recreational uses.
Transportation/Motorized Trails	PCS 117: The Forest Service should consider the concern that all impacts must be compared to natural levels. And impacts associated with OHV recreation should not be considered significant unless they are 50% or more of the natural level. The Forest Service should consider that road density does not equal motorized trail density and that impact information developed based on roads should not be used to estimate impacts form ATV and single tract motorcycle trails. The Forest Service should consider that in order to recognize the different needs and impacts, the evaluation must be differentiated between ATV and motorcycle trails in the alternatives. (22.40, 22.51, 22.61)
	Response: Thank you for your comment. We would need more information to address the first part of the comment because it is unclear what is meant by the term "natural level." For all alternatives, designated roads that are open to wheeled motorized use, part or all of the year, are open to full-size vehicles in addition to properly licensed OHVs (ATV's and motorcycles). The density of routes open to licensed OHVs less than 50 inches in width is greater than the density of routes open to full-sized vehicles once you factor in designated motorized trails open to OHVs less than 50 inches in width. We also recognize that there are some differences in the total amount of disturbance to soils and vegetation (and other resources) depending on the width of the trail. However, impacts to wildlife security would be comparable between an OHV route and one open to full-sized vehicles because the impact is due to the level of noise and presence of vehicles, not in the width of the trail.
Transportation/Motorized Trails	PCS 118: We support the Forest Service proposal to restrict motor vehicles to designated routes in order to prevent cross country travel that causes resource damage. We support a proposal that would close all illegally, user-created motorized trails and one that clearly restricts motorized trail use to vehicles less than 50 inches in width. The Forest Service should consider not allowing tracked vehicles on closed roads. The Forest Service should consider that many motorized use roads and old trails are in better condition than the user developed trails. (137.25, 156.3, 184.2, 200.2, 229.2, 235.21, 258.1, 277.3)
	Response: All of these comments have been considered and are discussed in chapter 2 of the EIS.
Transportation/Motorized Trails	PCS 119: The Forest Service should address the concern that the motorized recreationists are the only ones losing anything in the proposals. The Forest Service should consider that the National OHV Policy was not intended to be a massive motorized closure process. The Forest Service should consider the historical use of motorized trails in proposals and keep

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	motorized use an option instead of closing trails. (22.8, 22.9, 22.17, 22.18, 22.19, 51.1, 51.3, 79.3, 85.4, 86.1, 186.2, 191.8, 191.9, 268.10, 268.11, 268.12, 268.13, 272.1)
	Response: Thank you for your comments. As expected, the public comments on this project expressed the full range of opinions regarding motorized use. We heard from many people who would prefer more motorized opportunities, as well as those who would prefer more non-motorized opportunities. Both points of view were considered in meeting the Purpose and Need to better manage natural resources, improve recreation management in regard to motorized recreation and decrease user conflicts. Please see the Recreation analysis of the EIS for the effects of each alternative on motorized and non-motorized opportunities.
	PCS 120: The Forest Service should consider the needs of the aging population and the significance of adequate motorized access. (22.29,159.1)
Transportation/Motorized Trails	<b>Response:</b> The Forest Service strives to strike a balance with respect to resource protection and providing diverse recreation opportunities. In all alternatives motorized opportunities are provided and within those motorized routes there are different skill levels provided for elderly and disabled use.
Transportation/Motorized Trails	PCS 121: The Forest Service should consider adding more OHV trails instead of closing trails as there are more non-motorized trails available than motorized trail and this would also provide support to the local community. We do not support designating trails specifically for mountain biking as these would get very little use. The Forest Service should consider keeping trail 4083 and route U-1884 open to motorized use. The Forest Service should consider adding more trails to eliminate illegal use. (22.77, 77.7, 91.5, 92.1, 95.1, 97.3, 103.3, 103.7, 155.1, 172.3, 247.45)
	Response: Three action alternatives have been provided that look at a reasonable range of both motorized and non-motorized uses while balancing these recreational demands with environmental/biological concerns. The Helena NF has worked collaboratively with user groups and the communities to consider alternatives that provide for a high quality trail system for multiple uses. 4083 – is proposed as open in all alternatives. U-1884-is proposed as open in all alternatives. The designation for mountain bikes results from a demonstrated interest by forest users and is being considered as one possible option to address potential safety concerns.
Transportation/Motorized Trails	PCS 122: The Forest Service should consider closing and reclaiming roads and motorized trails due to extensive resource damage. The Forest Service should consider there are enough motorized roads and that more are not needed. The Forest Service should not allow motorized access on the hiking trails. The Forest Service should consider confining motorized use, restrictions for hunting seasons, including the archery season, and address safety concerns of shared trails. Road U-111 should not be opened motorized use since this is an otherwise roadless area. Motorized use in roadless areas, along the Helmville-Gould trail, and along the CDNST should not be permitted. (24.1, 107.3, 107.8, 131.1, 137.2, 137.27, 137.60, 137.61, 179.2, 213.1, 227.4, 232.3, 235.7, 235.9, 247.6)
	<b>Response:</b> All three action alternatives look at reclaiming roads and trails. The use of motorized trails is legal and an appropriate use of the National Forest. Three action alternatives have been provided that look at a reasonable range of both

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	motorized and non-motorized uses while balancing these recreational demands with environmental/biological concerns. Coordination with Montana Fish Wildlife and Parks' biologists has been ongoing during the travel planning process to address motorized access management during the big game hunting season as well as outside the hunting season. As discussed in the elk section of the wildlife report the number of bow hunters has continued to increase in recent years. Concerns exists that the increased pressure from archery hunters combined with the level of motorized routes may serve to reduce the availability of elk during the general rifle season both through increased archery harvest and displacement of elk. U-111 is proposed for decommissioning in alternative 3 and 4.
	Motorized use is appropriate in inventoried roadless areas. Alternatives 2, 3 and 4 all reduce the miles of motorized routes within inventoried roadless areas, as described in chapter 2 and would improve their overall unroaded character. An alternative was considered that would decommission all routes within roadless areas; this is discussed in more detail in chapter 2 in the section Alternatives Considered but Dismissed from Detailed Analysis. Your suggestion to not permit motorized use along the Helmville Gould trail is addressed by alternative 3. Your suggestion to not permit motorized use along the CDNST was considered and is discussed in chapter 2, as an alternative considered but dismissed. Both alternatives 3 and 4 manage the CDNST almost entirely for non-motorized use but both contain short segments that would allow motorized use.
Transportation/Motorized Trails	<b>PCs 123:</b> The EIS transportation section should include discussion of the miles of motorized trails that are open to public motorized use under each alternative. This is important because Alternative 2 has the highest amount of miles on the system to maintain when the closed roads in storage are taken into account along with the motorized trails. (22.94, 273.63, 273.64, )
	<b>Response:</b> Chapter 2 and the recreation section of chapter 3 discuss miles of trail open to public motorized use. Once roads are stored, they would no longer need maintenance so there would be a reduction in maintenance needs with storage.
	PCS 124: The Forest Service should address illegal OHV use and consider restricting U-1827 and U- New-1006 to non-motorized trail use. The Forest Service should consider adding signing at likely illegal motorized entry points. (247.44, 247.58)
Transportation/Motorized Trails	<b>Response:</b> This travel plan and the action alternatives are addressing illegal use and consideration of the trails mentioned for non-motorized designation. After the decision is made, determinations will be made as the appropriate and needs of signs to assist with the use and enforcement of the travel plan.
Transportation/Motorized Trails	PCS 125: The Forest Service should consider historic motorized use in the analysis and keep motorized use on these trails (e.g. Helmville-Gould 467 and CDNST 440, U403, U404, U406, U049 and U450). The Forest Service should define what a "Circle 5 restricted area" is. (36.1, 42.5, 52.1, 52.3, 52.5, 180.1, 180.6, 180.19, 252.1)
	<b>Response:</b> Historic use of motorized trails has been considered in the travel plan. Restrictions have also been clarified as part of this travel plan. We are not familiar with the term 'circle 5 restricted area.'

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Transportation/Motorized Trails	PCS 126: The Forest Service should consider a reasonable alternative to provide a motorized trail system equal to the non-motorized trail system because the adjacent non-motorized trails were not adequately factored in to the analysis and should include the entire Blackfoot planning area. The Forest Service should consider and recognize the significant cumulative impacts that motorized closures in the Helena National Forest and surrounding national forests have had on the public and not reduce motorized opportunities. The Forest service should consider closure to be based on site specific data and documentation, and the impacts must be more significant than naturally occurring events. (22.85, 121.5, 161.23, 161.24, 161.28, 162.26, 162.27, 164.25)
	Response: Alternatives 2, 3 and 4 were developed to provide a varied range of both motorized and non-motorized uses while balancing these recreational demands with environmental/biological concerns. The Helena NF has worked collaboratively with user groups and the communities to consider alternatives that provide for a high quality trail system for multiple uses. We also considered an 'equal sharing' or pro-recreation alternative that is described in more detail in chapter 2; this was not carried forward for detailed analysis.
	PCS 127: The Forest Service should consider not opening the Black Mountain/Lone Pont area to motorized use as it is used by grizzly bears. The Forest Service should consider the importance that all 4 National Forests in and around the NCDE have similar summer travel management plans so as to avoid user confusion and to prevent the concentration of OHV use on one particular forest. (247.24)
Transportation/Motorized Trails	<b>Response:</b> The Black Mountain area is only open for administrative Forest Service access and we feel this provides the adequate protection needed for grizzly bears in this area. This would not change with implementation of alternatives 2, 3, and 4. In the Lone Point area our range of alternatives includes increased motorized access over the existing condition to provide more recreational opportunity to meet our purpose and need. We considered further restricting motorized use in the Lone Point area but dismissed this from detailed analysis because under the existing condition motorized access is currently limited to a few roads.
	As indicated in the wildlife report, grizzlies have the potential to occur throughout the planning area. We used the Northern Continental Divide Ecosystem Access Management Protocol, the FP standard for open road densities, and other considerations as tools for analyzing potential effects to grizzly bears related to managing motorized access within the NCDE grizzly bear recovery zone. This analysis is shown in chapter 3 and in detail in the wildlife report. While we are not proposing to close both the Lone Mountain and the Black Mountain areas to all motorized use, the preferred alternative meets Forest Plan direction and NCDE Access Management Protocol guidelines while still providing recreational access
	PCS 128: The Forest Service should ensure that designations for motor vehicle use are in compliance with 36 CFR 212.55(b) and 40 CFR 1502.24 and that this is addressed in the Record of Decision. (181.5)
Transportation/Motorized Trails	Response: We agree that our analysis needs to ensure that motor vehicle use designations are in compliance with the all laws and regulation, including the 2005 Travel Planning Rule and this will be documented in both the EIS and the Record of Decision. Species such as elk and grizzly bear have specific management direction relative to motorized access as

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	disclosed in the wildlife report that is considered in designating routes for motorized use. Collectively, the effects of road, trail, or area designations are analyzed for potential impacts to a variety of wildlife species and their habitats that occur in the planning area. We also evaluate the effects of motorized use on other resources, as described in chapter 3, such as hydrology, soils, fish, cultural resources and recreation. These effect analyses incorporate the best science to make informed determinations and methodology and scientific accuracy are disclosed in the all specialist reports prepared for this project. We have ensured that all proposed actions are consistent with 36 CFR 212.55 (the text of which is described in appendix A) and 40 CFR 1502.24. Methods used by specialists in compliance with 40 CFR 1502.24 are documented by the individual specialist in their reports or in the official project record.
Transportation/Non-Motorized Trails	PCS 129: The Forest Service should consider not opening any non-motorized trails to motorized access such as Trail 440, 4113-BI and 417. Keeping these non-motorized would be cost effective, preserve elk habitat security, and allow natural reclamation of parts of these trails to continue. (45.11, 53.1, 118.7, 162.10, 273.13)
	Response: This has been considered by the IDT and is included in Alternatives 1, 2, and 4. The overall impact to elk security is addressed in the elk section of the wildlife report under the various management options reflected among the range of alternatives for trail 440 and 417. The extent of route 4113-B1 identified as motorized under the existing condition and the action alternatives is incorrect however and will be updated to more accurately reflect where the routes are suitable to motorized use due to vegetative recovery.
Transportation/Non-Motorized Trails	<b>PCS 130:</b> The Forest Service should emphasize non-motorized recreation opportunities. Providing non-motorized trail access, such as along the CDT and its connections provides recreationists with access remote areas, wilderness, and opportunities to enjoy the quiet of the forest, reduce resource damage, and protect wildlife including elk habitat. Decommissioning unnecessary roads is also an important action. (52.2, 58.20, 59.7, 62.1, 80.1, 123.3, 132.2, 187.1, 199.3, 215.1, 216.1, 222.2, 247.4, 247.8, 247.35, 266.6, 277.4)
	<b>Response:</b> The Forest Service recognizes the importance of quiet recreational opportunities, and within the suite of Travel Plan alternatives, has identified designated non-motorized routes in addition to those slated for storage and decommissioning. Various management options for motorized and non-motorized designations are included in the range of alternatives. The potential impacts of the proposed options upon elk are addressed in the elk section of the wildlife report.
Transportation/Non-motorized Trails	PCS 131: The Forest Service should consider having only non-motorized trails in areas that are steep, wet and easily erodible since motorized use increases the damage. (56.4)
	<b>Response:</b> The soils report identified roads and trails on sensitive routes, and provided BMPs for mitigating the effect of roads on sensitive soils and soil erosion.
Transportation/Non-motorized trails	PCS 132: The Forest Service should consider turning 1892-S1/D2 into a non-motorized trail. (150.3)  Response: We are not familiar with this road
Transportation/CDNST	PCS 133: The Forest Service should consider trying to keep as much if not all of the CDNST non-motorized as possible

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	since it leads to more enjoyable and safer wilderness experience, less maintenance, erosion, peace and quiet, and protects wildlife. The Forest Service should consider the Comprehensive Plan and Forest Service Manual (FSM 2353.44b.8) directs forest managers to make decisions that result in non-motorized ROS settings where possible, CDNST Study Report suggest that is be for non-motorized use, the trail is already mostly viewed as non-motorized. The Forest Service should consider that there are enough motorized routes in the forest, and stop illegal trespass from private property to reach the trail. (3.1, 4.1, 6.1, 7.1, 9.1, 10.1, 12.1, 13.1, 13.4, 17.1, 39.2, 39.3, 47.3, 48.2, 54.2, 58.28, 58.29, 58.30, 58.33, 58.34, 58.35, 58.36, 59.1, 59.2, 59.3, 60.2, 60.3, 60.6, 82.1, 88.6, 96.1, 98.9, 98.15, 98.18, 98.19, 98.21, 98.22, 98.23, 98.24, 98.25, 98.53, 98.54, 102.2, 102.5, 106.2, 107.10, 111.2, 112.2, 114.1, 114.2, 114.8, 114.9, 114.15, 114.17, 114.36, 114.37, 118.5, 122.1, 136.1, 147.2, 160.2, 173.1, 178.5, 181.1, 184.1, 185.2, 190.5, 193.2, 199.6, 201.2, 202.2, 208.4, 211.12, 218.2, 219.1, 223.1, 225.2, 230.1, 232.1, 235.4, 235.5, 236.2, 247.56, 247.57, 263.2, 275.2, 279.1, 283.6, 283.7, 283.12, 283.13, 283.14, 283.15, 283.23, 283.24, 283.25)
	Response: The Forest Service is considering a suite of alternatives with different management strategies for recreational use of CDNST; we considered these suggestions carefully and incorporated many into alternative 4, as described in chapter 2. Alternative 3 would allow only non-motorized use of the CDNST except in locations where the trail is co-located with an open road. Alternative 4 also minimizes motorized use along the CDNST as described in chapter 2. The Forest Service recognizes that motorized trespass issues involving the CDNST do exist in particular areas and we will continue to address these issues to the best of our ability. The Forest Service is not responsible for trespass occurring on private lands. The recreation section in chapter 3 describes each segment of the CDNST by alternative with an associated map to show where existing segments are on roads, etc. We carefully considered all options for motorized and non-motorized use along this trail to ensure consistency with the 2009 Comprehensive Plan, the National Trails System Act, and Forest Service direction.
	PCS 134: The Forest Service should consider having the CDNST open to both motorized and non-motorized so more people can enjoy it, providing access to some that have cabins near it, and to meet emergency needs. The Forest Service should consider the 2009 Act creating the CDNST specifically provides for motorized travel where it had been in use prior to 1978. Use along this corridor should also consider past NEPA decisions, such as the 1989 one for the CDNST in Montana and Idaho. There should be no net loss of motorized use along this trail. (8.1, 22.125, 114.20, 125.12, 154.1, 157.1, 161.11, 161.33, 214.2, 232.4, 242.1, 245.3, 245.4, 255.4, 255.5, 256.1, 257.2, 265.1, 268.20, 268.22, 268.23, 268.25, 268.26, 268.27, 268.28, 268.29, 268.31, 268.32, 268.33, 268.54, 268.55, 268.56, 268.62, 268.85, 268.88, 278.4)
Transportation/CDNST	<b>Response:</b> Thank you for your comment. The IDT analyzed the effects of each alternative for the CDNST appropriately and following laws, policies, and procedures that are in place. The final decision will include future management direction that will also comply with laws, policies, manual direction, and procedures that apply. Alternatives 1 and 2 continue to provide a mix of motorized and non-motorized uses along the trail. Alternatives 3 and 4 would focus primarily on non-motorized use but do not completely exclude motorized use. The recreation section in chapter 3 describes each segment of the CDNST by alternative with an associated map to show where existing segments are on roads, etc. We carefully considered all options for motorized and non-motorized use along this trail to ensure consistency with the 2009 Comprehensive Plan, the National Trails System Act, and Forest Service direction.
Transportation/CDNST	PCS 135: The Forest Service should enhance and clarify the CDNST section in the EIS to include measuring the

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	alternatives against Helena Forest Plan/National Comprehensive Plan goals, addressing the differences between the alternatives, and implementing the policies. The Forest Service should consider FSM 2553.44B principles and procedures in management of the CDNST. There is no evidence of use of this trail as a wildlife corridor and this is necessary if this will be used as a reason to limited motorized use. (58.5, 58.6, 114.6, 114.10, 114.31, 114.32, 114.39, 268.51, 283.5)
	<b>Response:</b> Thank you for your comment. We are analyzing the effects of each alternative for the CDNST appropriately and following laws, policies, and procedures that are in place. The final decision will include future management direction that will also comply with laws, policies, manual direction, and procedures that apply. The recreation section in chapter 3 describes each segment of the CDNST by alternative with an associated map to show where existing segments are on roads, etc. We carefully considered all options for motorized and non-motorized use along this trail to ensure consistency with the 2009 Comprehensive Plan, the National Trails System Act, and Forest Service direction.
Towns and allow (ODNOT	PCS 136: The Forest Service should not allow mountain bikes on the CDNST since they generally interfere with the nature and purposes of the trail. (114.18)
Transportation/CDNST	Response: This suggestion was considered and is discussed in more detail in chapter 2 of the EIS; it was not carried forward for detailed analysis
	PCs 137: The Forest Service should consider that if they reroute CDNST to Granite Butte this section should be made non-motorized based on Decision Notice and FONSI for the Montana/Idaho Section, April 7, 1989, Map 8. (114.21)
Transportation/CDNST	<b>Response:</b> Any future reroutes of the CDNST on the Lincoln Ranger District would be managed for non-motorized recreation to comply with CDNST national management direction. The recreation section in chapter 3 describes each segment of the CDNST by alternative with an associated map to show where existing segments are on roads, etc. We carefully considered all options for motorized and non-motorized use along this trail to ensure consistency with the 2009 Comprehensive Plan, the National Trails System Act, and Forest Service direction.
	PCS 138: The Forest Service should not close any portion of CDNST to bicycles before a defined bicycle management policy is implemented for the Montana and Idaho. (115.4)
Transportation/CDNST	<b>Response:</b> The Forest Service is considering a suite of alternatives with different management strategies for recreational use of CDNST. Alternative 2 would allow continued use by bicycles on the entire length of the CDNST within the Blackfoot Travel Plan area.
Transportation/CDNST	PCS 139: The Forest Service should consider adding signage and other sources for information of what may be observed along the CDNST to point out Scenic, Cultural, Historic, and Natural qualities to give more enjoyment for those using the trail.
	<b>Response:</b> Thank you for your suggestion regarding interpretive signing. Although this is a good idea, it does not meet the purpose and need for this project, and thus was not considered in this analysis; however, it may be considered as a

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	separate project in the future.
Transportation/CDNST	<b>PCS 140:</b> The Forest Service should proceed with an amendment related to the CDNST so they can define allowable modes of travel for the remaining roads and trails. (114.27)
	Response: Thank you for your suggestion. The EIS discusses this amendment in chapter 2.
	<b>PCS 141:</b> The Forest Service should consider including in the EIS an analysis of the effects of the proposed alternatives on the CDNST using the Recreation Opportunity Spectrum (ROS) methodology. An adequate analysis should start with recognition of the kinds of experience that would provide for maximum outdoor recreation potential. (98.4)
Transportation/CDNST	<b>Response:</b> Of the five major classes comprising the Recreation Opportunity Spectrum (ROS), only primitive and semi-primitive non-motorized classes are incompatible with motorized routes. None of the alternatives presented in the EIS would result in the encroachment of newly designated motorized routes in primitive and semi-primitive non-motorized areas. Determination of maximum outdoor recreation potential would prove to be difficult considering diverse groups of recreationists often favor dissimilar experiences.
	PCS 142: The Forest Service should consider keeping the Helmville-Gould Trail, 440, 467 and 487 including its portion on CDNST, as it currently is, open to motorized use to allow more people, including those handicapped or getting older, to view and use this area. The Forest Service should consider motorized use is allowed by the roadless rule, can remain open under FSM 2353.44b and FSM 2353.04i direction. Consider closing U-417 and U-418 but keeping Helmville Gould trail open to motorized use. The Forest Service should consider the trail does not severely impact wildlife and complies with FS elk standards. (19.1, 45.5, 45.8, 45.9, 52.4, 63.1, 63.2, 63.3, 87.4, 101.6, 101.7, 113.1, 113.4, 119.1, 120.3, 120.4, 120.5, 120.6, 120.7, 128.6, 156.4, 161.34, 180.10, 202.3, 211.1, 211.2, 211.3, 211.4, 211.5, 211.9, 211.10, 211.11, 212.2, 233.2, 261.1, 280.2, 281.3, 281.4, 281.5, 281.6, 281.8, 281.9, 281.10, 281.11)
Transportation/CDNST	Response: These options have been considered and are included in the range of alternatives analyzed in detail in the EIS. Alternative 1 would keep current management of these trails as suggested. We recognize the need for access to public lands for people with disabilities and strive in our proposed alternatives to provide ample recreational opportunities for all while balancing the needs for resource protection. In all alternatives, motorized opportunities are provided and within these, motorized routes aimed at varying abilities and skill levels are provided. Adherence to national and regional guidelines prohibits us from allowing some individuals access to areas generally closed to others.
	Alternatives 1, 2 and 4 include managing the Helmville Gould for motorized use. U-417 is proposed for decommissioning in alternatives 3 and 4; U-418 is not a recognized route. We also recognize that motorized use is allowed within inventoried roadless areas and alternatives 2-4 all retain varying levels of motorized use in these areas.
Transportation/Helmville-Gould Trail	PCS 143: The Forest Service should consider adding connections, such as Alice Creek Road from first, second, and third gulches and 401 and 404 trails to motorized use, to make complete loops for those using Helmville-Gould trail. (50.3, 90.2, 135.1, 159.3, 161.3, 161.4, 239.1, 242.2, 242.3, 246.5, 276.3)

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	Response: These suggestions are included as components of either alternative 2 or alternative 4. Trails 401 and 404 are motorized under alternative 1.
Transportation/Helmville-Gould Trail	PCS 144: The Forest Service should consider closing the Helmville-Gould trail (especially the section that crosses CDNST) to motorized use since this use leads to illegal incursions in closed areas, impacts the primitive nature of the area, creates rutting, and impacts wildlife. Closing this section to motorized use would provide a good hiking area. There are enough motorized routes already. (59.4, 59.5, 59.6, 162.4, 162.5)
	<b>Response:</b> This comment has been incorporated in Alternative 3. The effects of the project on soils is described in the soil section of the EIS.
Transportation/Mountain Bike	PCS 145: The Forest Service should not build any new mountain bike trails because there are plenty already in the area, there is not a big demand, and they would not get much use due to snow. The Forest Service should consider bikes and ATVs can share the same routes and construction would not be a productive use of money. The Forest Service should consider that increased mountain bike use could lead to illegal side trail use, turning into future motorized routes, and would impact roadless areas. Consider no new construction of mountain bike routes in the areas of Black Mountain, south and north benches of Beaver Creek and Baldy to Crater. (49.6, 79.2, 85.3, 95.2, 97.4, 103.6, 235.11, 247.25, 266.2, 271.1)  Response: This is considered in Alternative 1. In the action alternatives, sharing trails is also considered. Impacts of mountain bikes are addressed in the effects analysis for each resource area and can be found in the EIS.
Transportation/Mountain Bike	PCS 146: The Forest Service should consider expanding bicycle routes on the forest since current routes are minimal and to become more bike-friendly. The Forest Service should consider converting some trails (467 and 1891), and create links will increase more remoteness/solitude for riders. The Forest Service should consider not closing any mountain bike routes, including CDNST, as they allow access to scenic areas and make the area higher in demand for bicyclists. The Forest Service should acknowledge that mountain bike use does not diminish opportunities for solitude in IRAs. The length, difficulty and remoteness of trails in IRAs would ensure that there are opportunities for solitude and are not too heavily traveled, not mountain bike use. Consider also the opportunities for mountain bikers to enjoy access to wilderness areas by allowing mountain bike use on wilderness portal trails such as Scapegoat Wilderness portal Trails 490 and 493. (98.30, 98.31, 98.32, 98.33, 98.34, 98.36, 98.37, 115.1, 115.2, 115.3, 115.6, 115.7, 115.8, 132.5, 132.6)  Response: This is considered in all three of the action alternatives. Route 1891 would be closed to motorized use under alternatives 3 and 4 and 467 would be a non-motorized trail under alternative 3. People visit and recreate on the Lincoln Ranger District for a variety of reasons. We considered your suggestion for mountain bike use in IRAs Allowing mountain bike use on wilderness portal trails was considered by the IDT and is a component of alternative 4 where this us would not conflict with stock use
Transportation/Mountain Bike	PCS 147: the Forest Service should not allowing mountain bikes on the CDNST since they interfere with the nature and purposes of the CDNST. (114.19)

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	<b>Response:</b> This is the same as PCS 136. We considered this suggestion regarding mountain bike use on the CDNST. This is described in more detail in chapter 2; it was not carried forward for detailed analysis.
	PCS 148: The Forest Service should consider working with local mountain bikers to help fund and volunteer time for trail work and if opened to motorbikes the motorbike users could help maintain trails as well. (132.3, 191.5)
Transportation/Mountain Bike	<b>Response:</b> This is outside the decision for the travel plan. However, mountain bike user groups have already made this commitment to forest officials and look forward to these partnerships being developed.
	PCS 149: The Forest Service should consider treating bicycles like motorized vehicles since they have similar impacts on terrain and wildlife. (180.4, 180.6, 244.2)
Transportation/Mountain Bike	<b>Response:</b> The effects of the project on all affected resources are described in chapter 3 of the EIS. Specific effects of bicycles were not adequately addressed in the DEIS but this has been rectified for the FEIS, including the effects of this use on wildlife. Available research indicates that different recreational activities solicit different responses from wildlife. In one study comparing the response of elk and mule deer to ATV, horseback, mountain biking, and hiking, Wisdom et al. (2004) found that ATV's resulted in a great avoidance response than any of the other activities.
Transportation/Road Storage	PCS 150: The Forest Service should reconsider its use of road storage. Road storage prohibits road use for fire control, private property access, and other management purposes and can result in a reduction in property values. U-066 is an example. (116.1, 116.2)
	<b>Response:</b> Road storage is only proposed where there is no anticipated need for the route in the near term. Fire access was only one aspect considered when determining which routes should be put in storage without negatively impacting the ability to manage the forest. A portion of route U-66 is proposed for storage under alternative 2 but no other alternatives propose storage for this route. This U-66 route would remain closed to motorized use under alternatives 3 and 4 but not stored or decommissioned so that it could provide access to private property.
Transportation/Road Storage	PCS 151: The Forest Service should consider supporting more road storage/obliteration to remove stream crossings and curb illegal activity. The Forest should obliterate the first ¼ of road with berms and not just use gates for road storage. (137.46, 247.48, 247.50)
	<b>Response:</b> Roads proposed for storage would have the entrance obliterated to prevent access and culverts removed to make the road hydrologically stable. Roads that are typically gated have seasonal closures and are not considered storage.
Transportation/Road Storage	PCS 152: The Forest Service should consider showing culverts removed from stored roads separately from decommissioned roads and how this might impact winter motorized use. The Forest Service should consider adding a line depicting the number of stream crossings to be removed from stored roads in this section, not just in hydrology and fishery sections. The Forest Service should clarify the discrepancies in the tables in what the prescription for stream culverts will be on stored roads and include specific road treatments identified for each road segment included as a stored road. (46.18,

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	273.39, 273.43, 273.45)
	<b>Response:</b> Roads considered for storage are included in the Aquatic Species and Habitat analysis and culvert needs are discussed in more detail in those sections. A separate planning effort is underway for the Blackfoot Winter/North Divide travel plan. An implementation section has been added to chapter 2 of the EIS that describes how implementation of this project would occur, including road maintenance, prioritization of treatments and enforcement. Project design features have also been added that discuss the consistency of proposed actions in this project with other on-going or planned projects, including the winter plan. We will consider your comment about discrepancies in stream culvert prescriptions and fix, if appropriate.
	PCS 153: The Forest Service should consider decommissioning roads and trails, especially unauthorized routes, in order to increase roadless patch sizes. The Forest Service should consider conducting a decommissioning analysis to prioritize closures that would provide the for greatest benefit, and set a target date. The Forest's proposal for decommissioning roads should consider the following factors: in order to save on budget, meet maintenance needs, stop OHV abuse and violations, protect wildlife, and for water quality improvements. We support closure of non-arterial and dead end roads. We support the Forest Service's proposals for decommissioning under Alternative 3 and suggest that the following roads also be decommissioned: (19.1, 46.17, 137.13, 162.7, 162.9, 162.11, 227.6, 227.12, 247.39, 247.40, 247.41, 247.46, 247.53, 247.59, 247.66, 273.6)
	<ul> <li>1827 in sections 24, 25 and 26; 1827-F1, 1827-G1, 1827-H1, 1827-H2 and 2 unlabeled spurs in the same area</li> <li>U4133, U4133A, U4133B and 2 unlabeled routes in the area</li> </ul>
	U-057, a private-land only connector
	• 1840, 1840-B1
	• 1825-A1.
Transportation/Decommissioning	1881-A1, slated for closure under both alternatives, a dead-end spur about 1/3-mile in length that parallels an Open Highway Legal Vehicle route in a problem area for illegal motorized use.
	601-N2, 601-N5 and unlabeled spurs; all 1/3-mile or shorter length and parallel to Open Highway Legal Vehicle Routes.
	• 601-L1, 601- M1; redundant, already private land access from different point off Open Highway Legal Vehicle route; 601-L1 comes off CD.
	601-L3, redundant, other access to private land, private land connector only.
	1827-K1, 1/3-mile long spur off CD non-motorized trail, dead ends.
	<ul> <li>1827-J2, dead-end, redundant route with three spurs that lead to the CD, and parallel to Open Highway Legal Vehicle Route.</li> </ul>
	<b>Response:</b> The Forest Service considered decommissioning roads and trails (including unauthorized routes) as part of the Blackfoot Non-Winter Travel Planning process. The resource concerns mentioned are considered when making road management decisions, including decommissioning and storage. We have taken a careful look at the additional roads you

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	have suggested here for decommissioning. Most of these routes were identified for storage or closure instead due to a future need for access into these areas for long-term management purposes.
	PCS 154: The Forest Service should not close any roads. (65.1)
Transportation/Decommissioning	<b>Response:</b> Alternative 1 does not propose any road closures; the effects of this alternative were analyzed and compared to the effects of implementing the other alternatives. Implementing alternative 1 would not meet the purpose and need for action.
	PCS 155: The Forest Service should consider using of vegetative plantings, silt fences, and/or rock or log placement along the stream banks and/or steep slopes when decommissioning routes in narrow areas adjacent to streams when standard decommissioning cannot occur. (137.49)
Transportation/Decommissioning	<b>Response:</b> Additional BMPs to protect surface water from sediment runoff during decommissioning activities were added to Appendix H of the EIS. BMPs will be applied during all road decommissioning to prevent erosion and sedimentation. The preferred treatment for road decommissioning for this project is to install waterbars, out slope or selectively re-contour the roads, subsoil the road surface 12-18 inches, seed and fertilize if needed and scatter slash on slopes. This effort would encourage infiltration and re-vegetation of the road surface, prevent erosion, and encourage eventual recovery of soil productivity through natural site recovery. Decommissioning roads will be moderately effective at restoring soil productivity over the short term (< 10 years) on about 12 acres for alternative 2 and 284 acres for alternative 3. Eventually over the long term (> 10 years) full soil productivity will be restored on decommissioned roads. Mitigation measures outlined in the Programmatic Biological Assessment for Bull trout that are specific to road decommissioning and storage projects will be utilized in the implementation phase to ensure aquatic species and habitat are protected.
	A typical closure treatment is described in Table 4 – EIS. The decommissioning category does not preclude the use of closure methods described.
Transportation/Decommissioning	PCS 156: The Forest Service should consider decommissioning roads and not just putting them in storage. For example, the routes in Upper Canyon Creek (Road 1819 and U-051) should be fully decommissioned as Alternative 3 calls for, not just put into "storage" or closed as described in Alternative 2. (235.15)
	<b>Response:</b> We have considered closure, storage and decommissioning for multiple routes; determining which method was the most suitable for a particular route was based on resource concerns, access needs, and other site-specific factors. As stated, these routes are proposed for decommissioning in alternative 2.
Transportation/Seasonal Closures	PCS 157: The proposed seasonal restrictions are too narrow. The Forest Service should consider lengthening the riding season by having seasonal access restrictions only in areas that include wildlife wintering areas or reasonable bow hunting areas and by extending the season. The Forest Service should consider the restrictions does not allow enough time for enjoyment of off road vehicle use and creates congested trails during the summer months. (1.2, 50.2, 66.9, 68.15, 85.2, 90.1, 91.3, 124.6, 128.14, 159.2, 161.21, 164.2, 169.3, 172.2, 180.5, 191.6, 198.2, 204.2, 206.2, 207.1, 209.1, 239.4, 242.5, 276.2, 342.5)

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	<b>Response:</b> Different seasonal closure dates for roads and trails have been considered in the range of alternatives to address various concerns for wildlife and other resources. The potential effects of different restriction dates are addressed in the wildlife report for various species, particularly elk and grizzly bear. Coordination with Montana Fish, Wildlife and Parks biologists is ongoing to address concerns about motorized use levels with respect to big game security during the hunting season. Additional analysis of closures restrictions and potential impacts associated with big game has been included in the wildlife report and summarized in chapter 3 and appendix F of the EIS.
Transportation/Seasonal Closures	PCS 158: The Forest Service should consider closing seasonally restricted roads to all motorized use from September 1st to June 30th each year to keep closures consistent with closure dates on the Lewis and Clark National Forest. (49.3, 247.5, 247.61, 247.63, 266.5)
	Response: The objective of this analysis is to identify the transportation system necessary for management of the Helena National Forest. Varying seasonal closure dates are considered in all three of the action alternatives that look at a reasonable range of both motorized and non-motorized uses while balancing these recreational demands with environmental/biological concerns. The September 1 through June 30 seasonal restriction dates were most extensively considered in Alternative 3. The related effects of these seasonal restriction dates can be found in the various specialist reports.
Transportation/Seasonal Closures	PCS 159: The Forest Service should ensure that motorized restrictions apply to archery and general hunting seasons with consistent motorized access from September 1 to December 1 and closures should not favor bow hunters over OHV use by ensuring that equal attention is paid to both bow and general rifle hunting seasons. (180.7, 235.19, 264.3, 264.4, 271.3)
	<b>Response:</b> The big game analysis in the wildlife report addresses security during the hunting season. Coordination with Montana Fish, Wildlife and Parks relative to hunting season big game security is ongoing. Additional analysis addressing hunting season security and associated motorized restrictions will be further addressed in the wildlife report and the proposed Forest Plan amendment for big game which is a separate decision.
Transportation/Seasonal Closures	PCS 160: The Forest Service should establish varying seasonal closure dates to specific trails, roads, and areas with respect to resource management to meet seasonal wildlife needs and prevent disturbance to the environment. The Forest Service should consider not limiting motorized use in Barlett Creek Drainage to "under 50" if the area is open seasonally as the roads were built for log trucks and cars and trucks should be allowed. (101.9, 257.38, 271.7, 342.6, )
	<b>Response:</b> Varying seasonal closure dates are considered in all three of the action alternatives. The IDT considered the use of full size vehicles in the Barlett Creek drainage, however was not brought forward in an action alternative due to the vast amount of public comments and collaboration whose idea it was to allow for an area to be managed such as proposed in the three action alternatives. Different seasonal closure dates for roads and trails have been considered in the range of alternatives to address various concerns for wildlife and other resources. The potential effects of different seasonal closure dates are addressed in the wildlife report for various species, particularly elk and grizzly bear.

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	Full-size vehicle use would be restricted under alternatives 2, 3, and 4. The IDT considered this suggestion and determined that full-size vehicle access would not fulfill the purpose and need of providing a balanced mix of recreational opportunities. This alternative was dismissed from further detailed analysis.
Transportation/Seasonal Closures	PCS 161: The Forest Service should close snowmobile use between April 1st and December 1st due to grizzly bear emergence and wolverine natal denning during the spring and impact to wildlife security in the event of early winters. (247.62)
	<b>Response:</b> This is addressed in the Blackfoot-North Divide Winter Travel Plan and is consistent with the proposed action for that project.
	PCS 162: The Forest Service should consider that OHV use is good therapy for those suffering from stress disorders and should make this available on the forest. (22.128, 161.37)
Transportation/Motorized Trails for Therapy	<b>Response:</b> The Forest Service strives to strike a balance with respect to resource protection and providing diverse recreation opportunities. In all Alternatives motorized opportunities are provided and within those motorized routes there are different skill levels provided for elderly and disabled use.
	PCS 163: The Forest Service should keep motorized access open for those that are disabled or handicapped and cannot access the forest through other means, such as riding horses or walking, in order to still experience the beauty of the forest, recreate, hunt, and access mining claims. The Forest Service should consider that plan requirements are not met when handicapped access to the forest is ignored. (15.1, 55.1, 66.3, 79.1, 85.1, 91.1, 100.1, 101.1, 121.3, 125.1, 125.8, 125.11, 125.38, 128.3, 214.3, 246.7, 265.2, 265.4, 280.1, 281.7)
Transportation/trail access for disabled	Response: We recognize the need for access to public lands for people with disabilities and strive in our proposed alternatives to provide ample recreational opportunities for all while balancing the needs for resource protection. In all alternatives, motorized opportunities are provided and within these, motorized routes aimed at varying abilities and skill levels are provided. Adherence to national and regional guidelines prohibits us from allowing some individuals access to areas generally closed to others. Access to unpatented mining claims for mineral activities is provided for through submission, evaluation and approval of a Plan of Operations. The effects to mining claimants by alternative is described in the EIS on pages 112-118.
Hydrology	PCS 164: The Forest Service should consider the potential increase of sedimentation in streams due to erosion from roads. (259.4)
	Response: The comment is addressed in the Hydrology section of Chapter 3.
Hydrology	PCS 165: The Forest Service should consider including a discussion on the cumulative effect of increase sedimentation from maintenance needs not being met. (273.33)
	Response: Additional tables and text have been added to the hydrology report to address sediment reductions as a result of

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	stored roads where stream culverts were removed. The hydrology report addresses the positive impact that maintenance has on sediment production from forest roads. The transportation report addresses maintenance plans in the planning area.
Hydrology	PCS 166: The Forest Service should consider including a follow-up in the hydrology section to demonstrate how the number of crossings on the system for the alternatives per 6th HUC is increased over the crossings on the system for the existing condition in Table 18. (273.22, 273.25)
Hydrology	<b>Response:</b> We agree with your suggestion and the hydrology report has been updated to reflect maintenance as part of cumulative effects analysis. Other inconsistencies mentioned in PCS 25 have also been considered and addressed in the revised hydrology report, summarized in chapter 3 of the EIS.
	<b>PCS 167:</b> The Forest Service should consider including design features in the hydrology section on page 66 of the EIS to complete both the fish passage inventory and flood risk inventory for culverts and maps in the project file that show the culverts that have been surveyed or recently upgraded for passage and flood flows. (273.69)
Hydrology	<b>Response:</b> A Forestwide culvert inventory was completed for all fish bearing streams in 2007. A note referencing the map in the project record that shows surveyed culverts and recently upgraded culverts was added to the hydrology report that is summarized in chapter 3 of the EIS. We will consider your suggestion to address any needed updates to this inventory and a flood risk inventory and include this in chapter 2 if reasonable. As funding allows the forest is gradually making improvements to stream crossings. There are several examples of crossing improvements that have been completed in the recent past. Specific examples include: East Fork Willow Creek, West Fork Willow Creek, Nevada-Ogden Bridge, Klondike Creek, Snowbank Creek, Fields Gulch 2, Poorman Creek, and 2 structures on South Fork Poorman Creek.
Hydrology	PCS 168: The Forest Service should consider explaining why some of the crossings were not listed in Table 18 as sediment sources in the EIS since all stream crossings are a source of some sediment delivery. (273.70)  Response: Sediment sources listed in the Hydrology report were only those surveyed by field crews; not all of the stream
	crossings in the planning area were surveyed at the time of the DEIS report.
Hydrology	<b>PCS 169:</b> The Forest Service should consider clarifying the miles listed in Table 19 on page 67 as they do not match miles found elsewhere in the document. (273.71, 273.72)
	<b>Response:</b> The mileages listed in the table displaying non-system roads by 6th code HUC were verified during preparation of the EIS and any necessary corrections are now reflected in the EIS.
Hydrology	<b>PCS 170:</b> The Forest Service should consider including a more quantitative discussion of the riparian conditions on page 68, such as including streams that are outside of grazing allotments and have not been affected by placer mining, or by chemical pollution from mining. (273.73)
	<b>Response:</b> Only the best available data were considered in the discussion about Riparian Conditions (Affected Environment). We recognize that this discussion is qualitative, However, detailed quantitative information based on riparian

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	condition surveys or other analysis was not available. We feel confident that the analysis presented for riparian condition is adequate for the purposes of analyzing the expected effects of the action alternatives.
	PCS 171: The Forest Service should consider including a discussion on page 69 of the EIS for each alternative, about the risk of culvert washouts due to maintenance being reduced on closed roads, in the effects section in the EIS. (273.75)
Hydrology	<b>Response:</b> This comment was considered further in the hydrology report which is summarized in chapter 3 of the EIS. The risk for culvert failure is addressed in the Effects Common to All Alternatives section. Closed roads will be treated to be environmentally neutral meaning the pipes will be pulled and necessary action taken to prevent resource damage. There will be no anticipated need for road maintenance on a closed road therefore no additional discussion or analysis is necessary.
	PCS 172: The Forest Service should consider reexamining on page 70, the assumption that streams not previously identified as having water quality impairment will meet beneficial uses since some streams that are not listed as TMDL for sediment may have substantially elevated sediment levels in substrates based on field sampling. (273.76)
Hydrology	<b>Response:</b> This assumption is based on information available at the time of the writing of the hydrology report; any new information available between preparing the EIS and EIS has also been considered and updated as appropriate. We recognize that there are streams and sections of streams in the planning area that have not been evaluated, either by State or Federal agencies or their contractors. The best available information was used in our analysis, which includes TMDL analysis done by the State and its cooperators, as well as all available Forest Service data.
	PCS 173: The Forest Service should consider improving the adequacy of the Aquatics Design Criteria on page 70. (273.77)
Hydrology	Response: We have reviewed the list of assumptions (these are not design criteria) that are described on pages 69-70 in the hydrology section of the EIS; any inadequacies identified by the project interdisciplinary team in this list will be reflected in the EIS
Hydrology	PCS 174: The Forest Service should consider clarifying the statement on page 70 to indicate if the statement that 80% of the roads in the Blackfoot analysis area have been surveyed includes system roads, or if it includes unauthorized roads as well. (273.78)
	Response: Thank you for this suggestion; this has been clarified in the EIS
Hydrology	PCS 175: The Forest Service should consider identifying the benefits to the HUCs for each of the alternatives on page 71. (273.79)
Tyurology	<b>Response</b> : All of the tables in the hydrology section of chapter 3 of the EIS are broken down by HUCs so that the benefits to each HUC can be compared by each parameter analyzed.
Hydrology	PCS 176: The Forest Service should consider adding to the no action alternative on page 72, discussion to address the road maintenance effort and various partnership projects that are part of the ongoing cumulative effects that will continue to result

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	in some improvements in watershed condition. (273.80)
	Response: Thank you for this suggestion; this has been reflected in the transportation report. Road maintenance funding is allocated to each Unit based on the national model with each Unit getting their weighted share based on roaded land area and rec visitor use. Forests are given targets for passenger car and high clearance miles of maintenance which must be accomplished with the allocated dollars. Any remaining funding is distributed based on priorities set forth by the Line Officers and the Engineering staff. Additional maintenance opportunities can be realized through the accomplishment of other project work (including partnership efforts). Additional maintenance funding will be available upon the completion of Travel Planning as funding currently used to pay salaries for that effort can then be used for maintenance.
Hydrology	<b>PCS 177:</b> The Forest Service should consider offering a comparison between the alternatives on pages 73 and 74, showing the quantification of the number of stream crossings that will be restored on stored roads, and show those figures separately by HUCs, as has been done for decommissioned roads. (273.81)
	<b>Response:</b> Stream crossings on stored roads were evaluated. This is displayed in a revised table in the hydrology report which is summarized in the EIS.
Hydrology	<b>PCS 178:</b> The Forest Service should consider modifying the narrative on page 75 to show a more significant different between alternatives regarding sediment reduction. (273.83)
1.,,0.0.0.09	<b>Response:</b> We will ensure that due consideration has been given to sediment reduction differences between the alternatives and that is appropriately discussed and displayed in the hydrology report and the EIS
Hydrology	PCS 179: The Forest Service should consider adding a table on page 76 that will show the number of stream crossings to be restored from crossing restoration on stored roads for each action alternative, as well as the number of crossings that will be added to the system as a function of adding unauthorized routes to the system. (273.84)
	<b>Response:</b> Stream crossings on proposed stored roads and unauthorized routes proposed for adding to the system were considered in the analysis and are discussed and displayed in the hydrology report and the EIS.
Hydrology	PCS 180: The Forest Service should consider changing the wording in the Summary of Effects section on page 76 from "would alleviate" to "somewhat alleviate" water problems in the Blackfoot, with Alternative 3 addressing water quality much better than Alternative 2. (273.85)
	<b>Response:</b> We have reviewed this section of the EIS on page 76 with your suggested change in wording; any inadequacies identified by the project interdisciplinary team in this statement will be reflected in the EIS.
Hydrology	PCS 181: The Forest Service should consider showing in Table 23 on page 77, the number of stream crossings that are to be removed from stored roads and how many crossings are to be added to the system by 6th HUCs with the addition of unauthorized roads and motorized trails to the system. (273.86)

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	Response: Additional information has been added to tables in the EIS.
Aquatic Species and Habitats	PCS 182: The Forest Service should consider revealing site-specific data on the natural sediment loads in a stream and for the gradation of sediment from trail erosion and where it ends up, before it establishes a negative impact to the aquatic habitats from OHV use. (22.37)
	Response: The Blackfoot travel planning area includes Nevada, Middle Blackfoot, and Blackfoot Headwaters total maximum daily load (TMDL) planning areas as well as smaller portions of the Little Blackfoot, Dearborn, and Holter TMDL planning areas. Several streams within the Blackfoot travel planning area are listed by the Montana Department of Environmental Quality (DEQ) as having impaired water quality. Most of these streams are not fully meeting beneficial uses due to sedimentation, among other impairments table 17). Additionally, some non-listed stream reaches within the planning area flow directly into listed impaired reaches. The majority of the streams contained within the Blackfoot travel planning area are within the Blackfoot Headwaters TMDL (Montana DEQ 2008), which recommended a 30 percent reduction in sedimentation from forest roads. The Little Blackfoot, Dearborn, and Holter TMDL planning areas do not contain any listed streams within the planning area.
	Forest roads, by virtue of their existence on the landscape, can have a harmful effect on watershed values. The impact of a road is generally continuous whether the road is open or closed to public use, although, over time, unused roads are often partially stabilized by vegetation, thereby decreasing the negative impacts to the watershed. The direct/indirect effects analyzed in the EIS focused on site-specific effects from proposed changes to the road system. The cumulative effects in the EIS factored the effects of these changes (both beneficial and adverse) in with other past, present and foreseeable future actions, including existing transportation facilities. The alternatives identify the open-closed status of system roads as well as which roads would be decommissioned. Depending on the alternative selected for implementation, substantial beneficial impacts could results from reduced road densities on streams and riparian areas within planning area watersheds.
	The primary water quality concern related to the network of routes in the Blackfoot Travel Planning area is the transport of sediment from forest roads to streams. Other documented impairments in these watersheds include various metals related mainly to past mining activities, low pH, flow alteration, and alteration of riparian vegetation. This analysis focuses on sediment, as this impairment stems in large part, from forest roads in the Blackfoot travel planning area. Furthermore, this water quality issue has the greatest potential to be affected by the travel planning decision as resulting road decommissioning is completed.
	The soils analysis for the project examined soils and effects for the travel plan. Sensitive soils are found on 24 landtypes that are prone to landslides, slumps, wet soils and flooding, and soils that are vulnerable to compaction and erosion as a result of moisture content, parent material, and slope on the Helena National Forest. Routes on these soils were identified and practices are recommended to reduce risks to soils.
Aquatic Species and Habitats	PCS 183: The Forest Service should realize that the increase in motorized recreation and the aging of the road network in

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	the forest requires a highly balanced land management plan in order to balance the recreation load with the protection and restoration of the forest ecosystem. We recognize the difficulty in balancing the needs of motorized and non-motorized users with resource protection in the process of alternative development. (45.2, 137.22, 137.24, 152.2)
	<b>Response:</b> We agree. Trail impacts resulting from increased use can be managed through trail maintenance and enforcement. We developed a range of alternatives for the EIS, including alternative 4, to attempt to balance all of these needs while also meeting the purpose and need for action and the goals and objectives of our Forest Plan.
Aquatic Species and Habitats	PCS 184: The Forest Service should consider improving their emphasis on increasing sediment reduction through road decommissioning within 150 feet of streams, waterways, and bull trout drainages. (98.39, 98.40, 98.42, 112.3, 273.4, 273.5, 273.109)
	<b>Response:</b> We agree with this comment; this has been addressed with the development of Alternative 4 that maximizes decommissioning opportunities.
Aquatic Species and Habitats	PCS 185: The Forest Service should implement road decommissioning as identified in Alternative 3 as it is the most proactive in reducing sediment in streams. (98.41, 98.47, 240.3)
	<b>Response:</b> Eight miles of road would be decommissioned in alternative 2, and over 200 miles in alternative 3 and alternative 4.
Aquatic Species and Habitats	PCS 186: The Forest Service should consider including a reference to the table in the hydrology section in Alternative 1, in the paragraphs on page 85 that describes risk from road proximity. (273.95)
	Response: This information will be considered in the EIS.
	PCS 187: The Forest Service should develop a sediment control plan that is prioritized appropriately for all classifications of roads in the forest, so that forest management can target the highest priority sediment areas first. This should be included in the EIS as a project design feature. (98.46, 98.48, 273.27)
Aquatic Species and Habitats	<b>Response:</b> Best Management Practices and project design features identified in the EIS and draft ROD would be followed to reduce potential sediment as a result of project activities. Areas with sensitive soils have been identified and are prioritized based on the Forest Plan as having a high priority for sediment control. We feel that prioritizing these sensitive soil areas addresses this concern. The project design feature list in the EIS was reviewed to ensure consistency with the Forest Plan
Aquatic Species and Habitats	PCS 188: The Forest Service should consider providing an explanation in the hydrology section of the final document explaining the disparity occurring between the large difference in actions between alternatives 1 and 2, and the relatively small results between the two alternatives in sediment reductions. (58.14, 273.115)

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	Response: Comment was considered in analysis for the Hydrology report in the EIS.
Aquatic Species and Habitats	PCS 189: The Forest Service should consider including a map for each alternative that shows the distribution of stream crossings on the transportation system and on unauthorized routes. A comprehensive survey of all culverts should be completed and shown on this map. These steps would assist in identifying fish barriers and developing a sediment control plan. (46.41, 98.49, 247.31, 273.28, 273.96, 273.123, 273.125, 273.126)
	<b>Response:</b> A map of existing information on stream crossings and culverts will be included in the project record. A comprehensive culvert survey was completed in 2007 on all fish bearing streams.
Aquatic Species and Habitats	<b>PCS 190:</b> The Forest Service should consider verifying the stream crossings for Humbug and Sauerkraut that are designated for restoration or removal are actual culverts and not fords that have no risk of flood washout. The number of crossings will also need to be adjusted in the EIS narrative if unauthorized routes are added to the system. (273.11)
	<b>Response:</b> All comments refer to the Aquatic Species and Habitats report. In the hydrology report, there is no claim that the stream crossings in Humbug and Sauerkraut are culverts, they are referred to as stream crossings and decommissioning these roads will lead to stream crossing restoration.
Aquatic Species and Habitats	<b>PCS 191:</b> The Forest Service should ensure that there will be adequate funding designated for road/trail maintenance and that standards for maintenance will be established in order to prioritize road maintenance and protect forest resources from the negative effects of roads/trails and their motorized uses on the aquatic environment. (137.35, 137.36, 137.37, 137.42, 273.100)
Aquatic Species and nabitats	Response: The Helena National Forest does not control how much funding is allocated in the national budget line item that includes road maintenance. However, the Helena National Forest can determine how funding we do receive is applied on the ground. The Helena National Forest will continue to prioritize road maintenance funds where appropriate based on all resource values.
Aquatic Species and Habitats	PCS 192: The Forest Service should consider including in the cumulative effects section of Alternative 1, information detailing the positive and negative effects to show that some improvement will occur with the ongoing maintenance included in this alternative. (273.105)
	Response: This information will be considered in the EIS.
Aquatic Species and Habitats	PCS 193: The Forest Service should consider including in the cumulative effects section of Alternative 2, information detailing the positive and negative effects on the aquatic habitat, to show that some improvement will occur with the ongoing maintenance included in this alternative. In addition, clarification should be given as to if the unauthorized roads not yet mapped will be available for removal under this alternative. (273.112, 273.113)

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	<b>Response:</b> The first part of this comment is addressed in PCS 192. All known unauthorized roads in the project area have been mapped and have been considered as part of this analysis; if other unauthorized roads exist on the ground but have yet to be identified; these are not part of this analysis. Future analysis would be necessary if these are located to determine if closure is appropriate.
	As stated in the engineering specialists report, any unauthorized route that is identified after the travel planning effort is complete will be considered closed and treated accordingly to eliminate potential resource damage.
	PCS 194: The Forest Service should provide improved and expanded documentation that uses site specific data to support the 150 foot distance for fishery streams instead of a 300 foot distance that is specified in the Inland Native Fish Strategy. (273.26, 273.74, 273.98)
Aquatic Species and Habitat	<b>Response:</b> The distance of 150 feet was chosen as the threshold for negative road-stream interaction because this distance generally affords a buffer of sufficient width to minimize sediment delivery from roadsides (Ellis, 2008) as discussed in the hydrology report. This information is included in the Aquatic Species and Habitat report.
	However, for the FEIS, the analysis was expanded to show in detail potential impacts in all INFISH Riparian Habitat Conservation Area categories – from 50 feet to 300 feet. This is included in the aquatic habitat and fish report and this section of FEIS chapter 3.
	<b>PCS 195:</b> The Forest Service should consider that the 300 foot distance for motorized route access for camping along designated routes could threaten Riparian Management Objectives. The EIS should show how this dispersed camping would not threaten RMOs.
Aquatic Species and Habitat	<b>Response:</b> The 150 foot distance from streams was used for the aquatic habitat analysis based on application of all appropriate INFISH buffers for any trail or route construction. Under alternatives 2, 3 and 4 we would allow wheeled motorized vehicle travel for camping (and parking associated with camping) within 300 feet of designated system routes, including roads and trails (unless signed otherwise) as long as:
/ iquatio opecies and Habitat	No new permanent routes are created by this activity
	No damage to existing vegetation, soil, or water resource occurs
	Travel off-route does not cross streams
	Travel off-route does not traverse riparian or wet areas
	With these restrictions, implementing this buffer would not affect RMOs as described in more detail in the hydrology and aquatic habitat sections of chapter 3 of the EIS.
Aquatic Species and Habitats	<b>PCS 196:</b> The Forest Service should provide a GIS fish distribution map that will show where fish are present so that the appropriate buffer of 150 feet or 300 feet can be used to protect sediment delivery to streams with high fish population areas. (273.87 0

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	<b>Response:</b> A fisheries distribution map is included in the project record and was an important component of the analysis used.
Aquatic Species and Habitats	<b>PCS 197:</b> The Forest Service should consider emphasizing fishery and aquatic species concerns in any alternative that is chosen, and support their decision with information obtained from the completed biological assessment. (273.9, 273.32)
	Response: Fisheries and aquatic habitats concerns were taken into account and considered in the Travel Plan analysis.  The BA will be prepared during the preparation of the EIS and used as the basis for consultation with the US Fish and Wildlife Service for bull trout. This will be reviewed prior to a decision being made on this project.
Aquatic Species and Habitats	<b>PCS 198:</b> The Forest Service should consider adopting Alternative 3 in terms of managing bull trout, watershed quality, and fisheries since this alternative has the highest reduction of roads and stream crossings, which will result in the most effective reduction of sediment throughout the 6th code HUCs. ()58.13, 58.15, 240.2, 240.4, 240.5, 247.27, 273.8, 273.119
	<b>Response:</b> Alternative 4 was developed in the planning process that maximizes decommissioning and storage opportunities to reduce sediment and impacts to fisheries and habitat.
Aquatic Species and Habitats	PCS 199: The Forest Service should consider consulting with MDEQ TMDL program staff before finalizing the travel plan, to ensure that the final plan is consistent with development and implementation of applicable TMDLs and water quality improvement and restoration of support for beneficial uses in 303(d) listed streams within the planning area, as well as to ensure that Table 17 in the travel plan includes all of the impaired streams that MDEQ has identified. (135.2, 137.15, 137.33)
	<b>Response:</b> Thank you for your suggestion. The Montana Department of Environmental Quality was sent a copy of the EIS with our request for review and comment but we did not receive any comments from them. We have ensured that the most current information available on 303(d) listed streams was used in the preparation of the EIS
	PCS 200: The Forest Service should focus their sediment reducing activities to the highest priority TMDL sediment impaired streams: Alice Creek, Arrastra Creek, Beaver Creek, Anaconda Creek, Willow Creeks, Poorman Creek, Sauerkraut Creek, and the upper Blackfoot River. (199.4, 247.30)
Aquatic Species and Habitats	<b>Response:</b> Efforts were made in the development of alternatives to focus sediment-reducing activities on TMDL-listed sediment-impaired streams. Given the multiple resource demands of the HNF transportation network, sediment reduction was a dominant factor in many but not all proposals for road disposition in sensitive areas. We will consider this suggestion further during the implementation phase of the plan, once a decision is made.
Aquatic Species and Habitats	PCS 201: The Forest Service should consider not constructing the crossing on Route 1006 to Rooster Bill Gulch as this crossing could degrade the cutthroat trout habitat. If the crossing is created, it should preserve and protect the fish habitat as much as possible. (247.60)
	Response: Route 1006 is an existing open route, not new construction. Any new culverts would be constructed with

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	appropriate size to pass 100-year -flows and to allow for aquatic organism passage.
Aquatic Species and Habitats	PCS 202: The Forest Service should provide the following additional information regarding bull trout distribution: (1) That the Copper/Landers area is the only local population of bull trout found in the travel plan area. (2) That they will engage with FWS to determine the accuracy of the statement that most local populations are declining, but the Copper Creek population is improving. (3) To complete the biological assessment and identify the streams with high trout populations so that appropriate sediment reduction strategies can be implemented. (273.89, 273.90)
	<b>Response:</b> This information will be clarified in the EIS. A biological assessment will be completed for consultation with the US Fish and Wildlife Service.
Aquatic Species and Habitats	PCS 203: The Forest Service should expand the General Habitat Requirements section for bull trout to detail the importance of gravel quality and its potential to affect spawning due to sediment delivery from roads and trails. (273.91)
	Response: This information will be included in the EIS.
Aquatic Species and Habitats	PCS 204: The Forest Service should consider referencing Table 28 in the cumulative effects narrative under the Effects Common to All Alternatives section, add information explaining that negative effects also occur on closed roads, and ensure that the beneficial differences between the action alternatives are fully disclosed. (273.103, 273.117)
	<b>Response:</b> The EIS will ensure that both beneficial and adverse direct/indirect and cumulative impacts from proposed changes to the existing road and trail system are fully evaluated and disclosed.
Aquatic Species and Habitats	PCS 205: The Forest Service should consider expanding information in the EIS and Aquatic Specialist Report so that they place a higher emphasis on pearlshell mussels, by including a viability discussion that addresses the risk to pearlshell mussels, and how they will be affected as a result of the travel plan. (273.1, 273.7, 273.31)
	Response: A viability discussion for western pearlshell mussels will be included in the EIS.
Aquatic Species and Habitats	PCS 206: The Forest Service should add the following requirements to the EIS: (1) Use a survey to identify the pearlshell mussel habitats present in the travel plan area. (2) Map the current routes to dispersed campsites within the Inland Native Fish Strategy Riparian Habitat Conservation Areas. (273.29)
	Response: Additional information concerning western pearlshell mussels will be included in the EIS.
Aquatic Species and Habitats	PCS 207: The Forest Service should add the broad scale ranking of pearlshell mussels to the Pearlshell Mussel Status section on page 83 in order to identify the viability of this species across its entire range. (273.92, 273.118)
	Response: Additional information concerning western pearlshell mussels and a viability analysis will be included in the EIS.
Aquatic Species and Habitats	PCS 208: The Forest Service should improve the Pearlshell Mussel Distribution section on page 84 to utilize maps

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	identifying potential pearlshell mussel habitats in the travel plan area so that the risk to this species can be fully addressed. (273.93)
	Response: Additional information concerning western pearlshell mussels and a viability analysis will be included in the EIS.
Aquatic Species and Habitats	PCS 209: The Forest Service should consider modifying Table 28 so that it summarizes the effects to pearlshell mussels by 6th HUC and alternative, as this would improve understanding of the potential impacts to areas with pearlshell mussel habitats. (273.120)
	Response: -Additional information concerning western pearlshell mussels and a viability analysis will be included in the EIS.
Aquatic Species and Habitats	PCS 210: The Forest Service should ensure that they use the 2010 watershed baseline report in the EIS/EIS since it is more up to date than the 2000 baseline report that is currently being referenced. (273.88, 273.94, 273.101)
	Response: This information will be corrected in the EIS.
	PCS 211: The Forest Service should include information regarding sediment production from stored roads in the Consequences and Assumptions sections on pages 86 and 87, respectively. (273.97, 273.99)
Aquatic Species and Habitats	<b>Response:</b> Alternative 2 and alternative 3 would consist of closing approximately 39 miles of the 62 miles identified unclassified routes which would be considered a benefit from a soils perspective. These routes are assumed to be the most detrimental to soil conditions because they were not constructed with any erosion prevention measures. The effects of closing these routes would lead to natural revegetation of these sites and the reduction of erosion risk and eventual recovery of soil productivity through natural site recovery. Alternatives 2 and 3 would close or decommission 39 miles of unclassified routes. The remaining approximately 23 miles of unclassified routes would be identified for closure and possible decommissioning as part of this planning effort. Sediment production from stored roads is included in the sediment modeling in the analysis.
Aquatic Species and Habitats	PCS 212: The Forest Service should reevaluate the statement on page 93 regarding the revegetation on stored roads, and explain the actual effectiveness of this statement for the travel plan. (273.110)
	Response: This information will be considered in the EIS.
Aquatic Species and Habitats	PCS 213: The Forest Service should consider replacing the word "several" with the word "numerous" when discussing sediment delivery points in the Past Present and Foreseeable section on page 89, and possibly change the statement about "wildfire" as a past management activity, to "wildfire suppression." (273.102)
	Response: These changes will be made to the EIS.
Aquatic Species and Habitats	PCS 214: The Forest Service should disclose on page 90 that Alternative 1 will meet the requirements of the current Forest Plan, but at a slower timeframe than the other alternatives, and should include and identify project design features for this

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	alternative in the event that it is selected. (273.106, 273.107)
	<b>Response:</b> The EIS will ensure that alternative 1 is adequately analyzed and effects disclosed. Any clarifications needed to project design features will be made and reflected in chapter 2.
Aquatic Species and Habitats	PCS 215: The Forest Service should consider re-evaluating the sediment reductions identified in Table 26 on page 94 as they appear to be incorrect, and also do not match the summary of effects information on page 97. (273.114, 273.116)
	Response: This information will be clarified in the EIS
Aquatic Species and Habitats	PCs 216: The Forest Service should consider removing any statements in Alternative 2 that propose that many streams will benefit from the implementation of this alternative, and should consider re-evaluating and/or explaining the information in Table 25 that shows significant sediment reduction that will occur with this alternative since there are no apparent actions in this alternative that will support that claim. (273.108)
	Response: This information will be clarified in the EIS.
Aquatic Species and Habitats	PCS 217: The Forest Service should consider including a section in the plan that will detail the occurrence and intensity of the ongoing adverse effects to the aquatic ecosystems that will occur for all of the listed alternatives. (273.104)  Response: Refer to the Aquatic species and Habitat report for information regarding this concern.
	PCS 218: The Forest Service should focus on restoration and protection of watersheds and wetlands in the forest through maintaining roadless areas in order to protect the function and integrity of these areas. (137.56, 227.10)
Aquatic Species and Habitats	<b>Response:</b> The objective of this analysis is to identify the transportation system necessary for management of the Helena National Forest. The IDT analyzed the effects of each alternative utilizing the best available scientific information and by following laws, policies, and procedures that are in place. The final decision will include future management direction that will also comply with laws, policies, manual direction, and procedures that apply. Management of roadless areas is an important component of maintaining watershed function.
Aquatic Species and Habitats	PCS 219: The Forest Service should consider having wetland restoration and preservation strategies ready for assessment and implementation on any roads or motorized trails that are added to the forest, especially within the RHCAs and ensure that project design features for wetlands, springs and seeps are included. Using GPS technology to inventory routes within RHCAs would not be difficult. (137.57, 273.30)
	<b>Response:</b> Both action alternatives would reduce average annual sedimentation compared to the current condition and would reduce the mileage of roads within 150 feet of streams. Project design features are discussed in chapter 2 of EIS

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	PCS 220: The Forest Service should consider adding a statement to the mitigation measures and BMPs indicating that impacts will be mitigated if they occur. (137.58)
Aquatic Species and Habitats	Response: Project design features are discussed in chapter 2 of EIS
Heritage	PCS 221: The Forest Service should consider providing Class I documentation, as well as the survey strategy and implementation plan utilizing the Forest Site Identification Strategy (SIS), since Section 106 process is already underway. (78.1)
	<b>Response:</b> The survey strategy and the implementation plan has the potential to contain confidential cultural site information, therefore we do not included this information in a NEPA document. Also, survey strategy and implementation plans are generally created after an alternative is selected to ensure proper use of heritage staff time. Section 106 surveys will be completed in accordance to the Forest Site Identification Strategy prior to any ground disturbance related to the Blackfoot Non-Winter Travel Plan project.
	PCS 222: The Forest Service should consider that Livestock allotment use is as big if not bigger impact to water resources as motorized use in the areas since livestock manure has salt, pathogens, etc. that can seem into water. (144.1)
Livestock Grazing	Response: Analyzing the direct/indirect effects of livestock grazing on aquatic habitats is not part of this project. This is a transportation planning project and the EIS is analyzing the site-specific direct and indirect effects of proposed changes to the road and trail system. Separate NEPA is conducted for all grazing permits allowed on the National Forest. However, if measurable direct/indirect effects from changes to the road and trail system would result, these are considered along with other activities that may overlap these effects in time or space as cumulative effects. Cumulative effects are discussed in the aquatic habitat report and in this section of the EIS. Livestock grazing is identified in appendix D and was considered in the aquatic habitat cumulative effects analysis. Livestock grazing is not within the scope of this decision as separate NEPA is conducted for all grazing permits allowed on the National Forest. However, grazing use is included in the cumulative effects of each resource area, including hydrology.
Minerals	PCS 223: The Forest Service should consider that Atna, through CR Montana Corp., also owns a large amount of mineral rights within the area covered by the Blackfoot Travel Plan when making the travel plan decision. (104.1)
	<b>Response:</b> The EIS includes a description of the overall mineral interests and effects of the alternatives on mineral operations in the project area in the Minerals section. The specific area of CR Montana Corporations mining claims is described as the 'Seven-Up Pete area in the EIS on pages 109,113, and in Table 29 on page 115. The forest has not received any operating proposals from CR Montana Corp. See also response to PCS 31 and 36.
Minerals	PCS 224: The Forest Service should consider that gold mining should be restricted when making the travel plan decision. (199.7)

Subject	Public Comment Statements (PCS) and Forest Service Responses
	<b>Response:</b> Restrictions on mining is not part of the Purpose and Need for this project. The purpose and need for this project, found on page 6 of the EIS, is to provide a manageable system of designated motorized travel routes.
	PCS 225: The Forest Service must consider a pro-recreation alternative for the Blackfoot Travel Plan and pursue reasonable alternatives to motorized closures because of the significant cumulative impacts of continuous closures at this point in time. A pro-recreation alternative should provide at least 50% of the trails for motorized use and encourage equal opportunities for motorized and non-motorized travel. The Forest Service should consider modifying alternative 2 with the following suggestions so that it becomes this pro-recreation alternative: 1) continue to allow motorized use on trail 467; 2) keep trail 4040 and 401 open to motorized use under 50 inches; 3) connect the trail system in 1, 2, and 3 gulches with Alice Creek road; 4) connect state land in Section 16 to USFS land in Section 9 and use the power line road in this area as a connector; 5) keep trail 418 open to motorized use; 6) keep trail 440 from Stemple to Flesher open to motorized use; 7) retain motorized use on the CDNST; 8) allow motorized use on trail U417; 8) add connectors in the Hogum, Lincoln Gulch and Long Point Gulch areas; 9) keep the Lincoln cemetery to Beaver creek road open th entire season; 10) retain the connection in the Mike Horse area; 11) use the proposed alignment for Sand Bar to Fletcher that is in alternative 3; 12) motorized use should be allowed between May 16 and October 15. (22.10, 22.22, 22.23, 22.86, 22.115, 22.117, 22.118, 22.119, 22.120, 128.15, 161.30, 239.7, 239.8, 239.9, 268.5, 268.6, 268.17, 268.18, 268.37, 268.39, 268.40, 268.43, 268.89)
Recreation	<b>Response:</b> We considered an 'equal sharing' or pro-recreation alternative that is described in more detail in chapter 2 of the EIS; this alternative was not carried forward for detailed analysis. We also developed a new alternative (alternative 4) based in part on public comments received on the EIS. Your specific suggestions were considered as follows:
reoreation	This is included in alternatives 2 and 4
	2) This is included in alternatives 1 and 2
	3) This is included in alternative 4
	4) The Forest Service does not have the ability to authorize a motorized trail from state land (DNRC) in the Alice Creek area to NF Section 16 to Section 9; this would need state concurrence; this access was considered and is discussed briefly in chapter 2.
	5) This is included in alternative 1
	6) This is included in alternatives 1 and 2
	7) This is included in alternatives 1 and 2
	8) This is included in alternatives 1, 2, 3 and 4
	9) This is included in alternatives 2, 3 and 4
	10) This is included in alternative 2
	11) This is included in alternatives 2, 3 and 4 12) This is included in alternatives 2 and 4
	,
Recreation	<b>PCS 226:</b> The Forest Service should do a site specific analysis of each road or trail to be closed to address or identify where the public would go to replace the motorized resource proposed for closure. (22.64)

Subject	Public Comment Statements (PCS) and Forest Service Responses
	Response: The Helena National Forest has considered your comments and has prepared a range of alternatives to consider for motorized and non-motorized uses. The IDT analyzed the effects of each alternative utilizing the best available scientific information and by following laws, policies, and procedures that are in place. Three action alternatives have been provided that look at a reasonable range of both motorized and non-motorized uses while balancing these recreational demands with environmental/biological concerns. Please refer to the recreation analysis for further information on alternative areas to recreate.
	PCS 227: The Forest Service should consider adding to their analysis previous actions that resulted in loss to motorized recreationists. (22.6, 22.54, 22.64, 66.1, 268.5, 268.6,)
Recreation	<b>Response:</b> Page 123 in the EIS acknowledges that the 2001 Tri State OHV decision reduced motorized opportunities on National Forest and other Federal lands by prohibiting off-route wheeled motorized travel. The decision was driven by the need to protect resource, but the agency is continually looking to develop new motorized trail opportunities where resources can be adequately protected.
Recreation	PCS 228: The Forest Service should reconsider its assumption that OHV recreation would increase noxious weeds as this assumption is theoretical and should not be used to close motorized recreational opportunities. (22.70)  Response: Numerous studies of the effects of OHV recreation on noxious weeds have been conducted (Cole and Spildie 1998, Törn et al. 2009, Olive and Marion 2009). Motorized uses are generally considered to have greater potential to adversely affect the landscape and contribute to the introduction and spread of noxious weed species than non-motorized uses, primarily due to (1) the ability of vehicles to travel great distances, allowing visitors to access more terrain in a shorter time, including remote locations, and (2) the higher ground pressures and greater torque applied to soil and vegetation surfaces (Olive and Marion 2009).  The objective of this analysis is to identify the transportation system necessary for management of the Helena National Forest. The rationale for adding or removing routes to the system is based on a variety of factors, not just noxious weeds. Through internal and external review of all routes on the ground some user created routes were determined to be added to the long-term transportation system. Routes that are determined to remain as system trails and routes would be brought up
Recreation	to Forest standards during the implementation phase if necessary.  PCS 229: The Forest Service should consider the relative insignificance of impacts from recreational OHV use compared to the major effects of past wildfire, floods, and normal runoff in causing sedimentation. (22.71, 22.72)  Response: The magnitude of sediment decreases by decommissioning and closing roads are presented in the Hydrology report. It is impossible to predict the location or magnitude of natural events such as floods or wildfires that could lead to sediment runoff. Effects on soils for alternatives are disclosed in the EIS. Please refer to the hydrology section for information on sedimentation from roads.
Recreation	PCS 230: The Forest Service should reconsider their assumption that OHV recreation would adversely impact wildlife as this assumption is theoretical and should not be used as the deciding factor to close motorized recreational opportunities.

Subject	Public Comment Statements (PCS) and Forest Service Responses
	(22.71, 22.104,)
	<b>Response:</b> Various studies have shown that motorized use does have impacts upon wildlife as disclosed in the W/L specialist report. Additional analysis including results from research studies on wildlife responses to motorized use will be incorporated into the wildlife report and EIS, particularly in the elk section.
	PCS 231: The Forest Service should consider changing the allocation of the amount of trails between motorized and non-motorized uses and to base this on actual data gathered by going out and observing use. (22.11, 22.12, 22.86, 22.105, 22.106, 22.107, 22.136, 22.137, 22.138, 22.139, 22.140, 22.141, 121.1, 268.6, 268.73, 268.74, 268.75, 268.76, 268.77, 268.79, 268.81, 268.82)
Recreation	Response: The range of alternatives analyzed provides a suite of recreational opportunities, each with a different emphasis. Alternative 2 would result in more motorized trail opportunity, in terms of miles of trail available, than currently exists while Alternative 3 would result in fewer. Decisions regarding trail management cannot be made solely based on the public's preferred mode of transport on a particular trail. By law, other resource areas must be considered when designating allowable uses of trails. We used the best available information when determine which routes to designate for motorized or non-motorized use.
Recreation	PCS 232: The Forest Service should consider recognizing that outdoor recreation is the first stated purpose of the Multiple-Use Sustained Yield Act of 1960 and the National Forest Management Act of 1976. (22.27, 22.28, 22.62, 22.103, 268.71)  Response: Both Acts suggest that none of the five uses of the National Forest (recreation, timber, watershed, range, and
	wildlife and fish) have more importance than the other.
Recreation	PCS 233: The Forest Service should consider understanding that many motorized recreationists do not participate in the NEPA process. (22.4, 22.102, 268.4)
Redication	<b>Response:</b> The Forest Service has solicited comments from members of the interested and affected pubic and has actively collaborated with a variety of user groups, including motorized recreation groups (see page 54 of the EIS).
Recreation	PCS 234: The Forest Service should consider exploring ways to promote cooperation between motorized and non-motorized recreationist groups. (22.4, 22.42, 22.73, 22.108, 268.4, 268.49, 268.59)
Recreation	<b>Response:</b> We have been looking at more cooperation and partnerships, including trail maintenance, signage, and public education, with both recreation groups.
Recreation	PCS 235: The Forest Service should consider locating campground facilities and concentrated public recreational uses away from important or ecologically sensitive resources. Since OHV use is common at dispersed campsites, the Forest Service should consider identifying and/or designating these sites to avoid use of sensitive areas as much as possible and encourage use in more resilient areas. (66.4, 137.64)

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	<b>Response:</b> We agree that designated camping and other recreational facilities should be located away from sensitive areas wherever possible. The alternatives analyzed in the EIS do not propose any new dispersed camping or developed recreation sites. Alternative 4 includes the locations of appropriately-located historically used dispersed camp sites and the routes necessary for vehicles to get these sites off designated routes. Project design features and best management practices would be implemented to minimize the potential for resource impacts to sensitive areas.
Recreation	PCS 236: The Forest Service should consider recognizing that nationally, the public's spending on recreation increased 349 percent between 1979 and 2004 (URL cited in contact #22, comment #5). This importance of recreation should be reflected in the plan by providing adequate recreational opportunities that also support the local economy. (22.5, 22.122, 22.133, 22.144, 77.3, 92.6, 161.30)
	<b>Response:</b> Recreational pursuits have increased in recent decades as well as the money spent on such activities. The Forest Service does recognize the economic value that outdoor recreational enthusiasts contribute to local economies and values that impact.
	PCS 237: The Forest Service should consider keeping trails closed to OHVs. (149.3)
Recreation	Response: As expected, the public comments on this project expressed the full range of opinions regarding motorized use. We heard from many people who would prefer more motorized opportunities, as well as those who would prefer more non-motorized opportunities. Both points of view were considered in meeting the Purpose and Need to better manage natural resources, improve recreation management in regard to motorized recreation and decrease user conflicts. Please see the Recreation analysis of the EIS for the effects of each alternative on motorized and non-motorized opportunities.
	PCS 238: The Forest Service should consider allowing OHVs on all of the trails in the forest The Forest Service should also recognize the important experiences and value OHV recreation provides, including healthy and positive outdoor recreation. (22.2, 22.4, 22.111, 22.130, 22.143, 97.5, 246.1, 246.2, 268.2, 268.4)
Recreation	<b>Response:</b> As expected, the public comments on this project expressed the full range of opinions regarding motorized use. We heard from many people who would prefer more motorized opportunities, as well as those who would prefer more non-motorized opportunities. Both points of view were considered in meeting the Purpose and Need to better manage natural resources, improve recreation management in regard to motorized recreation and decrease user conflicts. Please see the Recreation analysis of the EIS for the effects of each alternative on motorized and non-motorized opportunities.
Recreation	PCS 239: The Forest Service should consider allowing motorized over-snow vehicles only if in accordance with 36 CFR 212.81 and the use will not substantially interfere with the nature and purposes of the CDNST (Comprehensive Plan, IV.B.6.b.(6).). (114.24)
	<b>Response:</b> Determinations regarding winter use are not a component of this non-winter plan; winter travel is being addressed in a separate travel plan process (the Blackfoot Winter Travel/North Divide environmental assessment).

Subject	Public Comment Statements (PCS) and Forest Service Responses
	PCS 240: The Forest Service should consider allowing OHV use for the purpose of sled dog training and ensuring opportunities for this use are provided. (77.3)
Recreation	<b>Response:</b> The range of alternatives analyzed provides a suite of recreational opportunities, each with a different emphasis. Alternative 2 would result in more motorized trail opportunity, in terms of miles of trail available, than currently exists. Mushers have the option of summer training using a non-motorized cart which would be allowed behind any gated Forest road closed to motorized use.
	<b>PCS 241:</b> The Forest Service should consider allowing OHV use for the purpose of access for those that are not physically fit, elderly persons, disabled person access and ensuring opportunities for this use are provided. (14.1, 15.7, 22.4, 77.3, 92.5, 268.4)
Recreation	Response: Thank you for your comments. The objective of this analysis is to identify the transportation system necessary for management of the Helena National Forest. As expected, the public comments on this project expressed the full range of opinions regarding motorized use. We heard from many people who would prefer more motorized opportunities, as well as those who would prefer more non-motorized opportunities. Both points of view were considered in meeting the Purpose and Need to better manage natural resources, improve recreation management in regard to motorized recreation and decrease user conflicts. Please see the Recreation analysis of the EIS for the effects of each alternative on motorized and non-motorized opportunities. The Forest Service strives to strike a balance with respect to resource protection and providing diverse recreation opportunities. In all Alternatives motorized opportunities are provided and within those motorized routes there are different skill levels provided for elderly and disabled use.
	PCS 242: The Forest Service should consider past restrictions on the areas where OHVs can be ridden and have caused good hunting areas to become crowded. Hunters cannot ride OHVs to their favorite spots far away from other hunters. These areas have become so limited that hunters rarely go a few hundred yards before running into other hunters. (77.2)
Recreation	<b>Response:</b> Designating additional routes that would be open during hunting season would likely disperse hunters that use OHVs in the short term. The Forest Service must, however, manage its transportation system to provide for wildlife security needs in addition to recreational and other uses. Additional analysis addressing hunter access, elk security, and quality of hunting experience will be completed in the Elk section of the wildlife report.
	PCS 243: The Forest Service should consider allowing OHVs so that game can be retrieved before it spoils. In areas where OHVs are not allowed, it might take several days to retrieve an animal. The meat would spoil in that amount of time. Consider access behind gates for game retrieval as well and motorized use off designated routes for this need. (77.2)
Recreation	Response: Research studies show that elk retreat to areas away from OHV use so allowing widespread OHV use during the hunting season may serve to push elk even further from motorized routes thus extending the retrieval distance and time. It is the responsibility of hunters to consider their ability to retrieve an animal prior to harvesting it. The 2001 Tri-State OHV Plan prohibits off-route motorized travel. The 2005 Travel Rule has a provision for access to dispersed camping sites and big game retrieval. For this analysis, we provide for access to dispersed camping sites in alternatives 2 and 3 (but not big

Subject	Public Comment Statements (PCS) and Forest Service Responses
	game retrieval). However, alternative 4, our preferred alternative, would allow for access within 300 feet of the center line of any designated road or trail for legal recreational uses, including hunting. This is described in more detail in chapter 2.
Recreation	PCS 244: The Forest Service should consider allowing OHVs in all areas so that hunters can hunt without a great fear of exhaustion or falling and hurting themselves without a way out. With a motorized vehicle, a hunter would have a better chance of getting out if such a terrible accident were to happen. Without these vehicles, hunting areas would be limited due to safety concerns. (77.2)
	<b>Response:</b> Your concern about safety is understandable. Hunter preference however, varies greatly with many hunters preferring more traditional approaches in environments more isolated from motorized use. Additional analysis will be provided in the wildlife report and EIS with respect to motorized use, elk security and hunting opportunity.
	PCS 245: The Forest Service should consider recognizing that there are now more than 70,000 registered OHVs in Montana. This, along with the increasing nonresident OHV use in Montana, indicates that interest in motorized outdoor recreation in areas such as this will likely only increase over time. (22.10, 22.57, 22.68, 22.107, 161.30, 247.67, 268.6)
Recreation	<b>Response:</b> The Forest Service acknowledges the number of registered OHVs in Montana have dramatically increased since the mid-1980s. The Forest Service seeks to find a balance between the desire for motorized recreational opportunities and resource protection. The agency is continually looking to develop new motorized trail opportunities when and where appropriate.
Roadless Areas	<b>PCS 246:</b> The Forest Service should consider expanding Inventoried Roadless Areas because of their value to wildlife security, sensitive species, watershed integrity, and dispersed non-motorized, fair chase hunting opportunities. (58.21, 102.3, 264.5)
	<b>Response:</b> The purpose of this analysis is to determine the motorized and non-motorized system routes within the planning area. Any change to the size of an Inventoried Roadless Area would need to occur under the Rule Making process.
	PCS 247: The Forest Service should consider protecting all IRAs on the Lincoln Ranger District. (58.21, 227.3, 227.11, 235.10, 262.2)
Roadless Areas	<b>Response:</b> Thank you for your comment. Potential impacts to inventoried roadless areas were evaluated as part of this EIS and are disclosed in chapter 2.
Roadless Areas	PCS 248: The Forest Service should consider decommissioning all roads in the IRAs that do not access private lands in order to improve the wildlife security, dissuade illegal use of these roads by motorized users, and enhance the integrity of these special areas. (137.73, 181.2)
Ruduless Aleas	<b>Response:</b> We considered this suggested alternative. The project IDT reviewed all roads in IRAs to ensure all feasible decommissioning was included as part of the range of alternatives. Any existing road in an IRA that is not proposed for decommissioning is because it is needed for access to private land, mining claims, special uses, or are used as snowmobile

Subject	Public Comment Statements (PCS) and Forest Service Responses
	routes. This alternative was dismissed from further detailed analysis and is described in chapter 2 of the EIS.
Roadless Areas	<b>PCS 249:</b> The Forest Service should consider adequately restricting the motorized uses in the IRAs and wilderness study areas. (49.4, 59.8, 107.7, 107.9, 137.69, 137.71, 137.73, 200.1, 227.2, 240.8, 244.4, 266.4, 267.2, 271.5)
	<b>Response:</b> We considered this suggested alternative, as described in the response above for PCS 248. The project IDT reviewed all roads in IRAs to ensure all feasible decommissioning was included as part of the range of alternatives. These restrictions are in place for all alternatives, but alternatives 3 and 4 propose the most motorized use restrictions in IRAs. Any existing road in an IRA that is not proposed for decommissioning is because it is needed for access to private land, mining claims, special uses, or are used as snowmobile routes. This alternative was dismissed from further detailed analysis and is described in chapter 2 of the EIS. There are no WSAs in the planning area.
Roadless Areas	PCS 250: The Forest Service should consider promoting the National Strategic Goals regarding the use of motorized equipment in wilderness (FSM 2326.02) which is to "Exclude the sight, sound, and other tangible evidence of motorized equipment or mechanical transport within wilderness, except where they are needed and justified." (137.70, 137.71, 137.72)
	Response: The planning area does not incorporate designated Wilderness.
	PCS 251: The Forest Service should consider keeping Hoqum Creek closed to all vehicles (except snowmobiles) year-round to protect wildlife security. (58.38)
Roadless Areas	<b>Response:</b> Thank you for your comment. It has been brought to our attention that the status of some routes in the area where incorrectly displayed and this has been corrected. Restricting motorized use in the Hogum area has been considered in the range of alternatives.
	PCS 252: The Forest Service should consider returning the Helmville-Goulde Trail and Route 487 that bisects the Nevada Mountain IRA from east to west and from north to south to non-motorized status as proposed in Alternative 3. (58.38, 58.42, 58.43, 58.44, 58.46, 58.47, 98.27, 98.28, 98.29, 98.35, 130.4, 162.3)
Roadless Areas	<b>Response:</b> The IDT has looked at these items and has considered each for inclusion in one of the action alternatives. The entirety of both trails would be managed for non-motorized use under Alternative 3. The responsible official will decide whether to implement one of the three alternatives, or any combination of the analyzed alternative components considered in the EIS.
Roadless Areas	PCS 253: The Forest Service should consider securing a public right-of-way on the Shingle Mill Creek/Mitchell Creek Road 4047 from the Nevada Creek Road to the forest boundary in Shingle Mill Creek. (58.45)
	<b>Response:</b> Thank you for your comment. This has been considered in the past. The landowner is not willing to consider allowing a right-of-way on this route.
Roadless Areas	PCS 254: The Forest Service should consider closing motorized routes to and from private access points occurring in the

Subject	Public Comment Statements (PCS) and Forest Service Responses
	Huckleberry Pass area (U-107, U109, and U011 T15N R10W) that are now gated and overgrown. (58.45)
	Response: The IDT has looked at all of these items and has considered each for inclusion in one of the action alternatives. Being considered doesn't necessarily mean that they will be added to an action alternative, some may not – but each item was discussed at length by the IDT. Routes U-107 is proposed as open in Alt 2 and closed in Alt 3, U-109,U-110, U-011 are being considered for closure or decommissioning in alternatives 2 and 3 through the Blackfoot travel planning process.
Roadless Areas	PCS 255: The Forest Service should consider managing the roadless areas for only non-motorized uses that are compatible with their wilderness character. Illegal off-road use by ORVs and unmanaged grazing by livestock should be prevented to protect sensitive high-elevation riparian zones and the high quality water at the sources of numerous streams on both side of the continental divide. (58.48)
Roadless Aleas	<b>Response:</b> All reasonable road decommissioning and restrictions on motorized use in inventoried roadless areas were considered, as described in the response to PCS 248 and 249 and in chapter 2 of the EIS. Grazing management and law enforcement are not components of this project and were not analyzed except where appropriate as part of cumulative impact analysis.
Roadless Areas	PCS 256: The Forest Service should consider not adopting Granite Butte as a Research Natural Area as it is not in conformance with the requirements for an "undisturbed area" due to the Davis 5 Fire and its proximity to the Marsh Creek Road tree clearing project. (125.2, 125.16, 125.17, 125.23, 148.3, 247.64)
	<b>Response:</b> This is the same as PCS 39. The Granite Butte Research Natural Area is not proposed in this Travel Plan; it is an existing proposed RNA within the Forest Plan and will continue as such regardless of this Travel Plan.
Grizzly Bear	PCS 257: The Forest Service should adopt Alternative 3 as it provides the best security measures for grizzly populations due to containing the lowest road density and higher control of motorized access and goes further in meeting the Helena Forest plan standard and interagency requirements pertaining to grizzly bears. (58.11, 137.81)
	Response: Thank you for expressing your support for alternative 3.
	<b>PCS 258:</b> The Forest Service should consider utilizing a better measurement of road densities by addressing the current best science for grizzly bears and using smaller analysis areas. The following documentation should be considered:
	<ul> <li>An adult grizzly was documented in the upper Boulder River area in spring 2012, and another sighting was documented in the Four Corners/Lockhart Meadow area along the CD in spring 2011.</li> </ul>
Grizzly Bear	<ul> <li>In 2010, a male grizzly bear was killed in Elk Park, and through genetic testing it was determined that this bear was from Glacier National Park.</li> </ul>
	<ul> <li>In 2006, an adult male grizzly from the NCDE was poached on the Mount Hagan Wildlife Management Area south of Anaconda.</li> </ul>
	<ul> <li>In 1980, a black bear hunter illegally harvested an adult male grizzly near Garrison Junction.</li> </ul>

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	(167.25, 167.28, 167.29, 167.30, 195.8, 195.21, 247.79)
	<b>Response:</b> The wildlife report and EIS both acknowledge that grizzly bears are known to be expanding southward from the recovery zone. The mortalities noted are all of males and there are no indications that their deaths are associated with forest roads. None of these occurrences are within the planning area and while they confirm bears are expanding their range, population levels or reproductive success cannot be extrapolated from this information for planning area lands outside the recovery zone. Formal consultation with the US Fish and Wildlife Service will be conducted for grizzly bear for the EIS and prior to a decision being made on this project. The biological assessment and wildlife report for this project provide more detailed analysis regarding access management effects. See response to comment 269 for more detail.
	PCS 259: The Forest Service should consider indicating why the moving windows analysis was not also completed for the grizzly bear distribution area, and discuss to what the current level of incidental take of grizzly bears is within the recovery zone and distribution area and what is the criteria for measuring and if it is being met with either action alternative. (167.26, 167.27, 195.9)
Grizzly Bear	<b>Response:</b> Additional clarification will be provided in the grizzly bear methodologies section of the wildlife specialist report and the ElS. Incidental take is defined by the US Fish and Wildlife Service; the consultation process for this project will determine if incidental take will occur. The USFWS previously described incidental take for both the recovery zone and distribution zone in a 2006 Biological Opinion for Continued Implementation of the Helena Forest Plan. The 2006 BO is available in the project file. See response to comment 269 for more detail. No access management changes have occurred since the BO was issued. We are pursuing formal consultation for this project with the USFWS for grizzly bear and any incidental take for this project specifically will be addressed in their Biological Opinion and this will be available to us prior to issuing a decision on this project.
Grizzly Bear	PCS 260: The Forest Service should consider addressing the potential problem areas for grizzly bears impacted by roads in the spring versus motorized use and why snowmobile use is allowed in the Red Mountain subunit, which is a core habitat. (167.31, 167.32, 195.14, 195.15)  Response: Snowmobile use in the district, a winter travel planning issue, is beyond the scope of this non-winter travel plan. Potential effects upon wildlife from snowmobile and other winter uses are specifically addressed in the Blackfoot – North
	Divide Winter Travel Plan and Environmental Assessment.
Grizzly Bear	PCS 261: The Forest Service should consider including a discussion of how mountain bike use could affect grizzly bear security and how proposed trails were planned. (167.33, 195.16)
	Response: Additional analysis will be provided in the wildlife report, EIS and BA addressing this concern.
Grizzly Bear	PCS 262: The Forest Service should consider adding a location map showing the lands acquired from Plum Creek and the Nature Conservancy and identify if there is any impact on grizzly bear security. (167.34, 195.17)

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	Response: A map is provided in the project record and was used in the wildlife analysis for this project.
	PCS 263: The Forest Service should consider providing a definition of open and total roads, as a road that is not obliterated is still considered a road by the Interagency Grizzly Bear Committee (IGBC). Any road that is placed into storage should still be classified as a road under IGBC criteria. (167.35, 195.18)
Grizzly Bear	Response: We provide a more detailed description of the IGBC road classifications in the wildlife report and biological assessment. The NCDE access management protocol paper is available in the project record and was used in the wildlife analysis. An Open road is defined (eng report) as Open to Public Travel-The road section is available, except during scheduled periods, extreme weather or emergency conditions, passable by four-wheel standard passenger cars, and open to the general public for use without restrictive gates, prohibitive signs, or regulation other than restrictions based on size, weight, or class of registration. Toll plazas of public toll roads are not considered restrictive gates. (23 CFR 460.2).
Grizzly Bear	PCS 264: The Forest Service should consider identifying how roads that are open in the summer, yet closed in the fall will be addressed for grizzly bears. (167.37)
	Response: Additional analysis will be provided in the wildlife report, EIS and BA addressing this concern.
Grizzly Bear	PCS 265: The Forest Service should consider addressing the management of roads in key areas between grizzly bear security areas an how to make them functional to bears. (167.38, 195.22)
	Response: Additional analysis will be provided in the wildlife report, EIS and BA addressing this concern.
Grizzly Bear	PCS 266: The Forest Service should consider including an analysis of the effect of keeping a road in storage versus obliteration and how keeping a road in storage that may be intermittently opened will affect long term grizzly bear security and how the decision was made to keep a road in storage versus obliteration. (167.39, 195.23, 195.24)
	Response: Additional analysis will be provided in the wildlife report, EIS and BA addressing this concern.
Grizzly Bear	PCS 267: The Forest Service should consider including a map of grizzly bear linkage areas and a discussion indicating if access routes within linkage areas would have a higher priority than closures in other areas. (167.40, 167.41, 195.25)
	<b>Response:</b> A linkage area map will be made available in the project record and additional analysis will be provided in the grizzly bear section of the wildlife report and EIS.
Grizzly Bear	PCS 268: The Forest Service should consider noting in the effects section of the EIS that elk security areas would benefit grizzly bears, although grizzly bear security is dependent on dense cover while elk does not. (195.11)
	Response: Thank you for your comment, this will addressed in more detail in the wildlife report and EIS.
Grizzly Bear	PCS 269: The Forest Service should consider addressing in the EIS, access requirement for grizzly bears in the distribution

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	zone, along with management recommendations in the Biological Opinion in the Helena Forest Plan. (195.12, 195.13)
	<b>Response:</b> Further clarification of access management specific to the distribution zone will be provided in the wildlife report and EIS. To date, no access management direction has been established or specified for the distribution zone which is outside the NCDE recovery zone. The NCDE access management protocol was developed for application within the NCDE Grizzly bear recovery zone. The NCDE Recovery zone is defined in the Grizzly Bear Recovery Plan. The Recovery Plan further notes that "although grizzly bears are expected to reside in areas outside the recovery zones, only habitat within the recovery zone is to be managed primarily for grizzly bears."
	The NCDE Access Management Rule (9/10/02) on page 1 states "Seasonally Secure Areas and density route calculations will be applied to Subunits that (a) approximate female home range sized areas; (b) include all available elevations; and (c) are generally bounded on watershed boundaries. Subunit development will NOT avoid areas of non-public ownership (all ownerships will be included within Subunits)." In addition, the protocol paper for NCDE Grizzly Bear Motorized Access Management and Flathead National Forest, Amendment 19 - Moving Window Motorized Access Density Analysis & Security Core Area Analysis for Grizzly Bear states on page 1 "the rationale and specific processes for the Northern Continental Divide Ecosystem (NCDE), as well as those for Flathead N.F. Amendment 19, are provided." On page 10 the protocol paper states "Access route density and security analyses will be applied to BMU subunits. These areas are meant to approximate a grizzly bear female home range, incorporate all seasonal habitats if possible, and generally follow watershed boundaries or other topographic features. As of 2005, BMU subunits have been delineated by biologists from US Forest Service, US Fish & Wildlife Service, US National Park Service, MT Dept. Natural Resource Conservation, MT Dept. Fish, Wildlife and Parks, Confederated Salish & Kootenai Tribes for the entire NCDE."
	The Terms and Conditions of the 2006 Biological Opinion for Continued Implementation of the Forest Plan include "Outside the recovery zone, the Forest will consult the Service if a net increase in permanent system roads exceeds 4 linear miles in the 5 year period succeeding this incidental take statement. Decommissioning of permanent system roads contributes to decreasing the net increase." Since the Biological Opinion was issued no new permanent road construction has occurred.
Grizzly Bear	PCS 270: The Forest Service should consider correcting the error in the EIS, on page 156 of Chapter 3, where it states that there are no grizzly bear Biological Activity Centers south of Highway 200. It has been noted that grizzlies are expanding with numerous bears being documented south of Highway 200. (247.15, 247.16)
Grizziy Bear	<b>Response:</b> Further coordination with MT FWP will be conducted to determine if planning area lands outside the recovery zone warrant designation as a biological activity center. This will be documented in the Biological Assessment for grizzly bear consultation with the USFWS.
Grizzly Bear	PCS 271: The Forest Service should establish the Helmville-Gould Trail and CDNST as non- motorized as it would further increase a secure habitat with an important grizzly bear Biological Activity Center and ensure functional connectivity. (247.7)
	Response: Alternative 3 would manage these trails as non-motorized. Additional analysis will be provided in the wildlife

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	report and EIS. See response to comment 270 above for discussion about BAC.
Grizzly Bear	PCS 272: The Forest Service should consider implementing best management practices for grizzly bear Biological Activity Centers (BAC) throughout the areas encompassed by the Blackfoot Travel Plan including lands between the Blackfoot, Little Blackfoot, and Prickly Pear watersheds with total route and open route density targets strictly adhered to within the US Fish and Wildlife Service Grizzly Bear Recovery Zone. (247.18, 247.49)
	<b>Response:</b> This will be addressed during coordination with MT FWP and through consultation with USFWS. See response to comment 270 above.
Grizzly Bear	PCS 273: The Forest Service should consider preparing for an increase in grizzly populations within the southern Lincoln Ranger District as this area will qualify as a BAC in the future. (247.19)
	Response: This will be addressed during the consultation process with USFWS. See response to comment 270 above.
Grizzly Bear	PCS 274: The Forest Service should reconsider the creation of motorized trail systems along both sides of Highway 200 at Cadotte Pass as this stretch of uninterrupted forest land is one of the most important wildlife corridors and the Bartlett Creek area north of Highway 200 as it would impact grizzly habitat as grizzly bears use the area extensively in the spring, summer, and fall for root and nut foraging. (247.14, 247.20, 247.21, 247.22)
	<b>Response:</b> Some of the expressed concerns are consistent with the no-action alternative. Additional analysis will be completed that better address these concerns and provided in the BA, wildlife report and EIS
Grizzly Bear	<b>PCS 275:</b> The Forest Service should consider developing an alternative motorized route between Hogum Creek and Stemple Pass as long as the seasonal closures are enforced to protect grizzly bear habitat. (167.28, 167.29, 167.30, 247.23)
	<b>Response:</b> The agency is considering in Alternative 3 a motorized route open seasonally to OHVs that would connect the Hogum Creek road system (1841) to Stemple Pass via the Crater Mountain road system (1825) and a short segment of new trail construction.
Canada Lynx	PCS 276: The Forest Service should adopt Alternative 3 as it has the least potential to affect the Canada lynx habitat due to the fewest miles of open routes and most seasonally restricted routes. (137.82)
	Response: Thank you for your support for alternative 3.
Canada Lynx	PCS 277: The Forest Service should complete a new biological assessment, biological opinion, incident take statement, and lynx management direction for the Forest Plan for lynx as the current information is inadequate and fails to use the best available science on necessary lynx habitat elements, including standards that protect key winter habitat. (167.14, 167.15)
	Response: The Northern Rockies Lynx Management direction amended the HNF FP in 2007. The direction included the

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	best available scientific information on lynx at the time and provides specific management direction for lynx. New science that has been gathered since development of the NRLMD will be addressed in the wildlife report, EIS and BA. The BA will be completed for consultation with the FWS.
	PCS 278: The Forest Service should complete a biological assessment, biological opinion, incidental take statement, and management direction Forest Plan amendment for the Forest Plan for the wolverine as none of these documents are in place. There have been wolverines sighted in the planning area near Flesher Pass. A regional direction for the wolverine should also be prepared as there currently is not a recovery plan and regional management direction amendment available. (167.11, 167.13, 247.80)
Wolverine	Response: A biological assessment will be completed for the preferred action and submitted to the USFWS for consultation. Through the consultation process it will be determined if a likely to adversely affect determination is warranted for any federally listed species which would then determine if the USFWS issues a Biological Opinion and incidental take statement for that species. The USFWS proposed listing rule did not identify Forest Management activities as a primary threat to wolverine therefore a forest plan amendment is not warranted and outside the scope of this project. The development of regional direction for wolverine is beyond the scope of this project.
Wolverine	PCS 279: The Forest Service should conduct an Endangered Species Act consultation for the wolverine since wolverines may be present in the planning area and the current biological assessment for the project does not address wolverines, which will be listed under the ESA prior to the final decision, is made to authorize and implement the Blackfoot Travel Plan. (167.12)
	<b>Response:</b> Currently a biological assessment has not been completed for this project. The biological assessment will be completed to address the preferred alternative. The wolverine will be addressed in the BA at the appropriate federal status classification prior to a planning decision.
Elk	PCS 280: The Forest Service should consider the impact that topography and wolves have had on elk behavior and their preference for tree canopy, as this may provide a better understanding of elk behavior, versus correlating their behavior with motorized roads and trails. (22.127, 101.2, 128.5, 161.35, 161.36, 205.3, 214.7)
	Response: Please see additional analysis in the wildlife specialist report and the wildlife section of chapter 3 of the EIS
Elk	PCS 281: The Forest Service should identify how much of the Hazard Tree Project has been implemented, whether this removed elk hiding cover and if this has affected elk security in these areas. (66.6, 247.36)
	Response: Additional analysis for elk addressing this concern will be provided in the wildlife report and EIS.
Elk	PCS 282: The Forest Service should consider protecting elk security by ensuring that the CDNST and the Gould-Helmville trail are designated as entirely non-motorized. (125.19, 271.6)
	Response: These options have been considered within the range of alternatives and analyzed in the wildlife specialist

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	report.
Elk	PCS 283: The Forest Service should consider providing additional analysis regarding elk vulnerability, so that information detailing current vulnerability can be compared to projected vulnerability under each of the proposed alternatives. (167.24, 195.7)
	Response: Further analysis will be provided in the wildlife report and EIS.
Elk	PCS 284: The Forest Service should clarify their statement that the failure of areas to meet the bull/elk cow ratios could be related to lack of forage, as this reasoning is unclear.(21.20)
EIK	<b>Response:</b> Further analysis will be provided in the wildlife report and EIS and if this statement is found it will be clarified or corrected.
Elk	PCS 285: The Forest Service should have their biologists work with State representatives and use data from radio telemetry studies to develop the following criteria for elk security areas in the Blackfoot Travel Plan: size, extent, distance from roads, and vegetative characteristics. (46.74)
	<b>Response:</b> Forest Service biologists have been working closely with Montana Fish, Wildlife and Parks' biologist to develop the elk security amendment.
Elk	PCS 286: The Forest Service should analyze, compare, and disclose the economic impacts of big game hunting, timber harvest, cattle grazing, and ORV use on the Helena National Forest. (46.78, 72.3)
	<b>Response:</b> The IDT considered multiple factors, including economic impacts, when developing and analyzing each alternative. The final decision will include future management direction that will also comply with laws, policies, manual direction, and procedures that apply. Refer to the economic report for additional information. A qualitative analysis should be updated for the EIS.
Elk	PCS 287: The Forest Service should consider analyzing the connections between elk retention in the forest and the benefit to the large carnivores that prey on elk. (46.30)
	Response: Additional analysis for elk will be provided in the wildlife report and ElS.
Mule Deer	PCS 288: The Forest Service should include an analysis of the proposed security direction in the EIS and explain how mule deer will be managed under the new direction since the removal of wildlife standard 4a will remove existing security for mule deer. (21.3)
	Response: Additional analysis will be provided in the wildlife report and the EIS.
Mountain Goat	PCS 289: The Forest Service should implement Alternative 3 as it provides the best alternative for protecting mountain goat

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	habitats by reducing motorized vehicle access, especially the closure of Trails U-330-B1 and 417 and the conversion of Trails 485 and 771-A3 to non-motorized trails. Consider decommissioning U-330-B1 from Stonewall to Cotter. (58.12, 235.18)
	<b>Response:</b> Thank you for your comment in support of alternative 3. U-330-B1 is proposed for decommissioning in alternatives 3 and 4 and closure in alternative 2.
Wildlife/General	<b>PCS 290:</b> The Forest Service should implement Alternative 3 as it provides the best outcome for big game security, wildlife connectivity, and habitat effectiveness. Motorized use results in noise and air pollution and this negatively impacts wildlife and hunting opportunities. (12.4, 13.3, 48.4, 58.9, 130.5, 137.83, 235.6, 244.5, 247.2)
	<b>Response:</b> Thank you for your comment. Your comment is consistent with the effects analysis for Alternative 3 as reflected in the W/L report and EIS.
Wildlife/General	PCS 291: The Forest Service should ensure that the Travel Plan emphasizes threatened and endangered species and sensitive species needs, wildlife security, wildlife connectivity, key corridors for wildlife migration, and habitat protection through reduction of road density and limitations on motorized travel. Roads can result in habitat fragmentation and numerous other effects to wildlife. The travel plan should also include a thorough evaluation of yearlong wildlife habitat needs in each district area and for each important species and have the final environmental analysis include a discussion of how each alternative would affect wildlife and fish habitat in each district area. (59.9, 137.23, 137.79, 137.80, 220.1)
	<b>Response:</b> Wildlife security, connectivity, and movement corridors were considered in various species analysis in the W/L report. The seasonal habitat needs of species were considered at the project level which includes the entire Lincoln Ranger district.
Wildlife/General	PCS 292: The Forest Service should implement legally adequate and scientifically sound management direction for grizzly bears, lynx, and wolverines and not allow any unpermitted take of wildlife. When wildlife data is insufficient, management decision should be made conservatively and monitoring should be implemented until the effects of motorized travel on the species are better understood. (167.6, 167.7, 227.9, 247.8)
	<b>Response:</b> Consultation with US Fish and Wildlife Service will be completed at the appropriate level for all federally listed or proposed species to determine if the action would result in incidental take. The most recent, best available science along with the accepted management direction is used to evaluate potential effects of the action on all federally listed species to avoid or minimize take.
Wildlife/General	PCS 293: The Forest Service should ensure that modified Alternative A has adequate monitoring measures an include requirements to designate management indicator species (MIS) and not use a surrogate MIS as it is not supported by current science. (167.18, 167.21, 167.22)
	Response: The project does not include a Modified Alternative A. MIS are identified in the Forest Plan and are analyzed in

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	the W/L specialist report.
	PCS 294: The Forest Service should calculate a set of fragmentation metrics for each species of interest based on how close to a road feature the species will use habitat and how large an area of contiguous habitat is required for different life functions. Restoration should focus on areas of moderate road density rather than high density areas as the moderate areas will have a greater potential for creating larger patches of unroaded land which should be the overall goal for wildlife habitat improvements. With increased road density, elk and deer harbor on private land resulting in the inability to use hunting season as a tool for managing populations. (227.5, 227.7, 227.8, 250.1)
Wildlife/General	<b>Response:</b> The potential effects of access management options are addressed for various species in the W/L specialist report. Proposed road restoration activities considered recreational opportunities including hunter opportunity along with potential future management needs, hydrology and fisheries concerns as well as wildlife habitat needs. In addition to FP standards for elk and mule deer, habitat effectiveness is used to evaluate effects during the summer period and habitat security is used to evaluate effects during the fall hunting period. Forest Service biologist and FWP biologist have been working closely together to address concerns about providing adequate security for elk on public lands during the hunting season.
	PCS 295: The Forest Service should consider developing coarse filter plan components to provide desired ecological conditions to maintain viable populations. (167.17)
Wildlife/General	<b>Response:</b> This project is not a vegetation management project and would have minimal effect upon ecological conditions. Access management and road densities are evaluated for various species in the W/L report to assess how the project may impact individuals, populations, or their habitats to maintain species viability.
	PCS 296: The Forest Service should consider that climate change impacts are only speculative; The EIS focus on climate change is not balanced with objective science or the needs of the public. There is also no evidence that motorized use has any significant impact on climate change. (22.145, 22.146)
Invasive Plants	Response: The EIS does not focus on climate change; climate change is discussed in only a few sections of chapter 3 (wildlife section for wolverine, lynx and elk and the invasive plants section) nor does it state that motorized use would have a significant impact on climate change. It is true that climate change impacts cannot be known for certain. The impacts of climate change have not been well studied, however some plausible hypotheses suggest that climate change may have important impacts to weeds (Simberloff 200). Since climate is often an important factor in the range limits of plant species, climate changes would likely affect the geographic ranges tolerated by plants, including weedy species. For instance, for weed species currently limited by freezing temperatures, warming may allow range expansions into areas not currently suitable for them. Drought can increase the susceptibility of ecosystems to invasion of non-native species, especially under elevated CO2 conditions (Smith and others 2009). However, prolonged drought or drought that occurs at the margin of a species range can result in mortality of non-native invaders such as Bromus tectorum (Jeanne Chambers, personal observation). Drought can also alter fire regimes; effects differ among ecoregions but may include altered vegetation and soil conditions that increase the potential for establishment or spread of weeds (Westerling and others 2006; Littel and

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	others 2009).
	PCS 297: The Forest Service should consider reducing roads, stopping off-road driving, requiring the cleaning of vehicle racks and tires, and rerouting trails around weed infested areas to minimize their spread. Alternative 3 would minimize weed spread. (58.16, 137.28, 137.74, 137.75, 137.76, 137.77, 137.78, 240.9, 259.3
Invasive Plants	<b>Response:</b> The project would reduce the miles of roads open for use and would limit travel to designated routes. Alternative 3 would reduce the mileage of motorized trails. The Forest weed program treats weeds on a regular basis. While weeds along trails can be spread by trail use, it is not likely that trails would be rerouted since doing so would create new ground disturbance that would be susceptible to new infestations.
Invasive Plants	PCS 298: The Forest Service should consider on page 31 adding that herbicides will be used according to mitigation measures and procedures detailed in the Forestwide herbicide EIS not just the label requirements. (273.51)
	Response: The suggested language will be added.
Botany	PCS 299: The Forest Service should complete a Biological Assessment, Biological Opinion, Incidental Take Statement and Management Direction Forest Plan Amendment for the Forest Plan for whitebark pine, as none of these directions are currently in place, as well as a Regional Direction since there is not a recovery plan and Regional Direction in place. An ESA Consultation should also be completed since whitebark pine is present throughout the analysis area for the project, and should identify what effects to whitebark pine may occur under the proposed actions. (167.8, 167.9, )
	<b>Response:</b> Possible effects to whitebark pine are addressed in the Botany Report for the project and summarized in chapter 3 of the EIS. Since whitebark pine is a candidate species, preparation of a biological assessment and consultation with the US Fish and Wildlife Service is not necessary. The species is considered a Forest Service Region 1 sensitive species.
Botany	PCS 300: An ESA Consultation should also be completed since whitebark pine is present throughout the analysis area for the project, and should identify what effects to whitebark pine may occur under the proposed actions. (167.10)  Response: Possible effects to whitebark pine are addressed in the Botany Background Report for the project. Since
	whitebark pine is a candidate species, consultation with the FWS is not necessary.
Soils	PCS 301: The Forest Service should consider that soil loss from OHV is insignificant compared to natural soil erosion, include examples of this in the report, and don't use this to conclude that soil erosion is a reason to restrict motorized use. Also consider that restricting motorized use in some areas increases use in others and that he season of use can affect runoff. (15.5, 22.38)
	<b>Response:</b> Effects on soils for alternatives are disclosed in the EIS. Off-Highway Vehicle cross-country travel is prohibited in all alternatives. Off-Highway Vehicles are assumed to cause erosion much like any other wheeled vehicle on designated roads.

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	PCS 302: The Forest Service should consider installing water bars in order to reduce the sediment discharge from trails and roads. (22.76)
Soils	Response: Appendix H contains BMPs to construct or reconstruct drainage control structures as needed in Road Operations and Maintenance, and similarly in Road Construction and Reconstruction. The EIS discloses effects to soils from the alternatives and provides BMPs that include water bars to reduce soil erosion.
	PCS 303: The Forest Service should consider that sediment yields are higher for motorized use compared to non-motorized use and assess risk of sediment delivery as a function of the number of stream crossings on the motorized trails added to the system. Motorized use creates soil erosion and damages trails for other users. (12.2, 15.3, 137.4, 273.23)
Soils	<b>Response</b> : Additional analysis of motorized trail stream crossings was added to the Hydrology section of the EIS. The EIS discloses effects to soils from the alternatives. The effects of non-motorized trails proposed in the action alternatives, compared to motorized trails, would result in a much lower risk of extensive loss of soil productivity due to narrower tread widths and less surface disturbance. They would create less area with soil compaction that could lead to surface erosion. Further, BMPs and design features would be applied to non-motorized trails to reduce erosion potential. Overall, the effects of non-motorized trails would be much smaller compared to the same mileage of motorized trails. Open motorized routes in sensitive landtypes have a higher risk of causing loss of soil productivity, compaction, and degradation of soil structure, decreased infiltration and water holding capacity, reduction in organic material, accelerated surface erosion, and exacerbation of mass failure risks, such as the risks of landslides or slumps. Sediment delivery at stream crossings are addressed in the hydrology section of the EIS.
Socioeconomics	PCS 304: The Forest Service should consider that OHV recreation with a good network of trails is a positive economic impact, such as gas tax, for Montana and its communities and the forest service should look it getting access to some of those funds. But closing routes, both permanently and seasonal, to motorized use will negative impact this economic source and the communities can't just really on the little money that comes from wilderness use. Motorized users need more regionally and nationally significant trails. The Forest Service should consider a benefit-cost comparison of any new CDNST construction per actual motorized and non-motorized user. Motorized use would be greater. (22.43, 22.74, 22.112, 51.6, 161.29, 169.4, 180.2, 191.7, 268.30, 268.47, 268.50, 268.60)
	<b>Response:</b> The Forest Service does recognize the positive impact that OHV recreation contributes to local economies. The issue of gas tax is outside the scope of this project as the delegation of those funds is at the discretion of Congress. The Forest Service welcomes all recreational pursuits without regard to the economic impact different users have.
	PCS 305: The Forest Service should consider OHV use is cultural issue since families have been doing it for generations and should be considered in the plan. (22.45)
Socioeconomics	<b>Response:</b> All alternatives provide some level of motorized recreation. In order to protect resources some recreational activities will shift to other areas of the Forest. OHV use is valued by the Forest Service and the Lincoln Ranger District will continue to provide OHV opportunities. The Archaeological Resources Protection Act (ARPA) definition of "cultural" or

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	"archaeological resources" are any material remains of past human life or activities which are of archaeological interestat least 100 years of age. In the state of Montana material remains or activities that are at least 50 years of age are considered a "cultural or archaeological resources". The terms "material remains" and "archaeological interest" are defined in the ARPA uniform regulations: "Material remains" means physical evidence of human habitation, occupation use, or activity, including the site location or context in which such evidence is found. "Of archaeological interest" means capable of providing scientific or humanistic understandings of past human behavior, cultural adaption, and related topics through the application of scientific or scholarly techniques such as controlled observation, contextual measurement, controlled collection, analysis, interpretation and explanation. Therefore, OHV use would not meet the requirements to be analyzed as a cultural issue for the purpose of this project.
	<b>PCS 306:</b> The Forest Service that public lands should be managed by those that visit them and this adjustment should be used in the evaluation. (22.100)
Socioeconomics	Response: Thank you for your comments. The Helena NF has worked very hard in collaboration with communities and groups to incorporate public comments, desires, and goals into the travel plan. We feel we have been very inclusive. Forest Service lands are managed by the federal government and thus public lands owned by all Americans. Projects are designed to be inclusive of local needs and often it is comments from locals that drive alternatives and ultimately the Decision. The Forest Service does not however weigh comments against each other based on where the commenter lives.
	<b>PCS 307:</b> The Forest Service should consider that wilderness and areas free of motor vehicles is a draw for recreationists and that these people bring in a lot of economic dollars to Montana which is needed for the state's fiscal stability. (48.3, 149.2)
Socioeconomics	<b>Response:</b> People visit and recreate on the Lincoln Ranger District for a variety of reasons. The Forest Service is interested in ensuring that whatever recreational uses people choose, that they are consistent with resource objectives for that respective area
Socioeconomics	PCS 308: The Forest Service should consider that just building more bicycle trails is not enough to create economic and social benefits, but must get the local communities interested in the bicycle culture and forest should seek outside help to do this since bicyclist spend a lot money each year in communities they go to bike around. (115.9, 132.4)
Socioeconomics	<b>Response:</b> It is not the role of the Forest Service to promote one form of recreation over another; all forms are welcome in the appropriate areas. The purpose of this Travel plan is to provide an array of recreational opportunities across the Lincoln Ranger District.
Fire and Fuels	PCS 309: The Forest Service should address mitigation measures to reduce the impact of motorized road and trail losses due to wildfires in the EIS as they have become a significant cumulative impact and issue to motorized recreationalists. (22.31)
	Response: Should we have any wildfires, trails and roads may be closed temporarily for public safety and would reopen

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	when it is safe to do so. Properly engineered roads and trails are more likely to withstand the effects of post fire run-off.  Often roads that are chosen for decommissioning are those that are user created and thus not engineered or placed correctly on the landscape.
Fire and Fuels	PCS 310: The Forest Service should address the results from the Davis 5 Escaped Fire and fire potential in proposed Alternatives 2 and 3. (125.3)
The and Table	<b>Response:</b> We have worked with fire management on the areas with fire potential and have identified these areas in Alternatives 2 and 3.
Monitoring	PCS 311: The Forest Service should ensure that there is an effective program for monitoring, evaluation, and adaptive management in evaluating the effects of the Travel Plan and the effects of motorized use of trails and roads on aquatic habitats and fisheries, wildlife habitat, weeds, and sensitive plants. The EIS should discuss the monitoring program and provide additional disclosure in regard to potential outcomes related to monitoring of travel management, such as stating that roads or trails will be closed if monitoring shows that motor vehicle use is causing or will cause adverse effects. The EIS should provide mechanisms for public disclosure of the monitoring analysis and the decisions for the Travel Plan, identify the roles of the Forest Service, other agencies, independent science, and public monitoring as well as discuss resources and funding availability for monitoring and adaptive management in regard to the effects of travel. (137017, 137.84, 137.85, 137.86, 137.87)
	Response: Best management practices and project design features/mitigation measures would apply to the alternative selected for implementation and would become part of the decision and therefore, non-discretionary. Monitoring, Implementation and Enforcement would be implemented for this project and is discussed in chapter 2. We recognize that monitoring motorized use is important to ensure resource impacts are minimized. During the implementation phase of the travel plan, a more detailed implementation plan would be developed to prioritize actions and monitoring. Many of our internal processes (e.g. contract management) automatically build in monitoring. The decision and implementation phase would comply with Forest Plan monitoring requirements for applicable resource areas – particularly those where we are trying to minimize impacts (e.g. recreation/user conflicts, wildlife).
Monitoring	PCS 312: The Forest Service should monitor road and trail conditions to ensure that roads and trails receive the needed maintenance for repair and erosion control. The Forest Service should consider the use and maintenance of water bars, dips and mounds to divert runoff and use of volunteers to assist in these efforts. (22.134, 137.26)  Response: Trail conditions vary across the Lincoln Ranger District and are constantly changing. Agency personnel, partners, volunteers, and concerned citizens monitor trail conditions to varying degrees throughout the field season. Adjustments to maintenance priorities to respond to resource concerns are made based on available funding and personnel.
	All best management practices, and project design features/mitigation measures described in chapter 2 would apply to roads that are stored, decommissioned or constructed and these practices and measures incorporate the use of drainage features.

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Appendix A-Forest Plan Direction	PCS 313: The Forest Service should consider that they proposed travel plan is not consistent with Forest Plan Goal 15, to develop and implement a road management program with road use and travel restriction that are responsive to resource protection needs and public concerns. (46.10, 181.3)
	Response: The commenter states: "We find that the direction to be "responsive to resource protection needs" has not met. There has been no onsite analysis or trail condition survey of user created trails selected for adoption into the transportation network in Alternative 2, therefore the Forest cannot attest to whether these proposed routes meet Forest Plan requirements, the Clean Water Act, bull trout, INFISH, nor direction for impaired watersheds. A thorough analysis would specifically perform onsite inspections and then describe how each route segment affects water quality standards, riparian health nor site specific wildlife and fisheries effects. How will user created routes not selected for adoption be treated to assure motorized travel will cease and resource impacts from these disturbed areas be rehabilitated?"
	We went through a very thorough, interdisciplinary process to develop the proposals for each alternative, including recommendations on what roads and trails should be closed, stored, or decommissioned based on the need to minimize existing adverse impacts. The rationale for the proposals under each alternative is described in more detail in the project record. Chapter 2 discusses the rationale use to propose a road for storage instead of decommissioning. During this interdisciplinary process, we also conducted on-site ground trothing and evaluation where needed to ensure resource protection need. How all changes to the proposed road and trail system would impact natural and cultural resources is described in chapter 3. All unauthorized routes have been evaluated and addressed in the alternative proposals. If unauthorized routes are discovered that were not known prior to preparing this analysis, they would be closed to public motorized use.
Appendix A-Forest Plan Direction	PCS 314: The Forest Service should consider improving the standard for enforcement and level of collaboration with FWP in the final travel plan document, as what is currently in the document regarding enforcement and cooperation is insufficient. (46.11, 46.33, 46.45, 46.46)
	<b>Response:</b> Monitoring, maintenance and enforcement is described in chapter 2 as an action common to all action alternatives; this has been added since the preparation of the DEIS.
Appendix A-Forest Plan Direction	PCS 315: The Forest Service should consider re-evaluating the travel plan to ensure that the needs of the travel network can realistically be met. Presently, the travel plan proposes to expand the travel network and at the same time acknowledges a shrinking budget, which puts into question the realistic amount of maintenance that will be available for the larger travel area. (46.47, 46.48, 98.44, 273.17)
	Response: The objective of this analysis is to identify the transportation system necessary for management of the Helena National Forest. Monitoring, maintenance and enforcement is described in chapter 2 as an action common to all action alternatives; this has been added since the preparation of the DEIS. The proposed action alternatives do not expand the travel network (for instance, many miles or road would be decommissioned under several of the alternatives). While the alternatives reduce the overall size of the system, we recognize this as a proposal that provides a higher-quality system. We

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	also recognize that maintenance and enforcement are critical to the success of any alternative selected.
Appendix A-Forest Plan Direction	PCS 316: The Forest Service should consider re-analyzing the user created routes identified for inclusion in the travel plan. If these routes do not meet FSH trail standards, they should not be included as an adopted route in the final plan. (46.39, 46.40
	<b>Response:</b> The objective of this analysis is to identify the transportation system necessary for management of the Helena National Forest. The rationale for adding user-created routes to the system is based on a variety of factors, not just their condition. Through internal and external review of all routes on the ground some user-created routes were added to the long-term transportation system. Routes that are determined to remain as system trails and routes would be brought up to Forest standards during the implementation phase if necessary.
	The 2001 Tri-State OHV decision (located in the project record) allows for off-highway vehicle use on the national forest. Off-highway vehicle use would occur on designated routes to provide a variety of motorized and non-motorized recreational opportunities. However, designation of specific routes requires local site-specific planning consistent with the Forest Plan such as this analysis. The OHV decision and the local site-specific planning approach prescribed is consistent with the proposed roads rule the Forest Service recently updated (36 CFR 212). It provides a process for resolving the disposition of unauthorized roads, including unauthorized roads and trails. It moves the agency towards designated routes, which many people, organizations and other agencies have advocated. The OHV decision has been incorporated into this analysis process in the proposed decisions regarding unauthorized roads.
	PCS 317: The Forest Service should consider including information regarding the CDNST in Appendix A, since there is currently no reference to it. (114.14)
Appendix A-Forest Plan Direction	<b>Response:</b> Appendix A refers to Forest Plan direction; the CDNST was not specifically discussed in the Helena National Forest Plan. The EIS has been updated with a map that reflects the CDNST segments and designation of use on each along with a write up. This can be found in the EIS as well as in the recreation report.
	PCS 318: The Forest Service should consider that a primary objective of the travel plan is to responsibly construct and maintain the travel network with the primary goal of protecting the water and soil quality within the forest.
Appendix A-Forest Plan Direction	Response: The objectives in the travel plan, which includes soil and water conservation practices are applied to transportation facilities. Those are included in Appendix H Best Management Practices. National Forest System roads are managed for transportation uses not for vegetation production. New roads and trails will be areas where land will be withdrawn from soil productive use, and dedicated to transportation use. For the soils analysis for the project, an examination was made of soils and effects for the travel plan. Sensitive soils are found on 24 landtypes that are prone to landslides, slumps, wet soils and flooding, and soils that are vulnerable to compaction and erosion as a result of moisture content, parent material, and slope on the Helena National Forest. Routes on these soils were identified and practices are recommended to reduce risks to soils.

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Appendix A-Forest Plan Direction	PCS 319: The Forest Service should consider referencing pages 19-182 from contact #291 regarding specific ratings for routes in Appendices A, B, and C. (46.36, 227.14)
Appoint Annual Control of the Contro	<b>Response:</b> The commenter refers to a system of road ratings prepared by his organization. The Forest Service used its own rating system to determine the ratings of roads and motorized trails within the plan area.
Appendix A-Forest Plan Direction	PCS 320: The Forest Service should consider mentioning the riparian habitat conservation areas in amendment 14 on page 395 of the EIS. (273.121)
	Response: Riparian habitat conservation areas (RHCAs) are discussed in the Aquatic Species and Habitat report.
Appendix A-Forest Plan Direction	PCS 321: The Forest Service should consider referencing the various Programmatic Assessments for bull trout on pages 412 and 413, regarding meeting different standards. (46.42, 273.122, 273.124)
Appendix A-Forest Plan Direction	Response: The 1999 Programmatic Biological Assessment for Road Maintenance for Bull Trout (MT Bull Trout Level 1 Team) is referenced in the table on pages 414 and 415 of the EIS.
	PCS 322: The Forest Service should emphasize collaboration with MFWP in the new travel plan since this is a Forest Plan requirement. (46.35, 46.96)
Appendix A-Forest Plan Direction	Response: MFWP will be consulted on culvert removals and instream activities with the State 124 permit process. Historically, collaboration has occurred with MFWP and has occurred to a great extent on wildlife & fish habitat management, enforcement, and prevention. The Helena NF is proud of this partnership and our abilities to work together. We will continue to strive to further this partnership, yet recognize the strength of this partnership due to our past efforts.
Appendix B-Scoping	PCS 323: The Forest Service should consider modifying EIS appendix B so that comments from all organizations are attributable to the groups and not only to the individual signing the letter so as not to seem the one group is favored over another. (46.52)
	Response: All substantive comments received are addressed within the EIS. The source of the comment is taken into consideration
Appendix B-Scoping	PCS 324: The Forest Service should refer to Appendixes A, B, and C for specific ratings of routes on Ltr0291 (pages 19-182).(227.15)
	<b>Response:</b> The commenter refers to a system of road ratings prepared by his organization. The Forest Service used its own rating system to determine the ratings of roads and motorized trails within the plan area.
Appendix C-Road Details by Alternative	PCS 325: The Forest Service must analyze all motorized routes in Inventoried Roadless Areas for their impacts on each special roadless area attribute as proposed in each Alternative since it is required by the Travel Planning Rule and

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	Executive Orders. (46.53)
	<b>Response:</b> The IDT analyzed the effects of each alternative for IRAs appropriately following laws, policies, and procedures that are in place. The final decision will include future management direction that will also comply with laws, policies, manual direction, and procedures that apply. Refer to the IRA report for the complete analysis.
Appendix C-Road Details by Alternative	PCS 326: The Forest Service should consider the following road/trail closure/designation change recommendations as part of the Blackfoot Travel Plan: (1) Enforce the 1978 legislation direction that created the Continental Divide National Scenic Trail (CDNST) to restrict motorized vehicles along the CDNST except for emergency vehicles and certain private landowners, and motor vehicles that were allowed on the trail prior to legislation passage. (2) Flesher Pass to Stemple Pass-Trail 440, closure of surrounding roads 1827 and 1828 and designating 440 as non- motorized under Alternative 3 will increase critical habitat security and provide excellent non-motorized recreation and consider 4090-A1 as a connector to Flesher Pass. (3) Nevada Mountain Roadless Area, it is important to protect the non-motorized integrity of the area. (4) Closing the Gould- Helmville Trail and Trail 487 to motorized use and the decommissioning of Road U417 under Alternative 3 would improve the roadless character of the area, improve fall hunting, create great non-motorized recreational opportunities, and reduce illegal motorized vehicle use to the Nevada Mountain Area. (5) Baldy Mountain Area, support the closure of all the spurs of Roads 1826 and 1838 and the seasonal closures on Roads 1826 and 1838 under Alternative 3 in the Baldy Mountain area as this area has rampant OHV abuse and travel violations. (6) Canyon Creek routes, support the proposed decommissioning of all the roads in the headwaters of Canyon Creek as proposed in Alternative 3 as they have served as conduits for illegal OHV use. (7) Bartlett Creek (T15N R7W), most of the roads in the 13 sections between Alice Creek and Roger's Pass should be obliterated or decommissioned and not opened to ATVs as proposed under Alternative 2 as this land acquired from Plum Creek contains some great habitat. (8) U-417 should not be used to connect Poorman and Gould-Helmville as this will fragment elk habitat. (9) U-411 within Black Diamond drainage, there is no need for this dead end route
	Response: Thank you for your suggestions. We considered them as follows:
	1) This is addressed by alternatives 2 and 4
	<ul><li>2) This is addressed by alternatives 2 and 4</li><li>3) This is addressed by all alternatives</li></ul>
	4) This is addressed by all alternative 3
	5) This is addressed by alternative 3
	6) This is addressed by alternative 3
	7) This is addressed by alternative 1
	8) This is addressed by alternatives 3 and 4
	9) This is addressed by alternative 4

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	10) This suggestion was considered as described in chapter 2 of the EIS; it was dismissed from further detailed analysis because the route is necessary for access to the fire lookout and homeland security tower.
	PCS 327: The Forest Service should not create a separate mountain bike system as proposed due to resource impacts, user conflicts, and additional maintenance workload to an already underfunded trail maintenance budget. (46.65)
Appendix C-Road Details by Alternative	Response: The majority of the designated mountain bike system would be on existing routes already open to mountain bikes. Any new construction would be designed to minimize resource impacts by using sustainable trail construction principles. Overall, user conflicts involving mountain bikes has not been a significant issue on Lincoln Ranger District trails open to mountain. Should significant user conflicts arise in the future, the agency has the ability to manage use on specific trails to address user conflicts. Funding to pay for construction and maintenance of new routes would be shared by partners, volunteers, and the agency.
Appendix C-Road Details by Alternative	PCS 328: The Forest Service should include a discussion of road conditions and adequacy of road maintenance and best management practices and add adequacy and availability of funding to implement needed road/trail best management practices to the road details in Appendix C of the EIS including the creation of a program for continuing road and trail inspection, evaluation, and maintenance program. (137.14, 137.40)
	Response: This objective of this analysis is to identify the transportation system necessary for management of the Helena National Forest. The Helena National Forest does not control how much funding is allocated in the national budget line item that includes road maintenance. However, the Helena National Forest can determine how funding we do receive is applied on the ground. The Helena National Forest will continue to prioritize road maintenance funds where appropriate based on all resource values. The final decision will include future management direction that will also comply with laws, policies, manual direction, and procedures that apply. For further information refer to the transportation report.
	Road maintenance funding is allocated to each Unit based on the national model with each Unit getting their weighted share based on roaded land area and rec visitor use. Forests are given targets for passenger car and high clearance miles of maintenance which must be accomplished with the allocated dollars. Any remaining funding is distributed based on priorities set forth by the Line Officers and the Engineering staff. Additional maintenance opportunities can be realized through the accomplishment of other project work. Additional maintenance funding will be available upon the completion of Travel Planning as funding currently used to pay salaries for that effort can then be used for maintenance.
	Chapter 2 includes more detail regarding road maintenance, monitoring and implementation.
Appendix C-Road Details by Alternative	PCS 329: The Forest Service should consider keeping or adding the following trails under Alternative 2 to provide better motorized recreational opportunities within the forest. (1) Trails 404 to 401 to 440 as a complete trail loop as proposed. (2) Trail 467, completes the loop opportunity for ATVs on the south side of Highway 200 and improves motorized recreation opportunities. (3) Trail 418, maintain as a single track as it is the only single track designated on the north side of Highway 200. (4) Trail 440, keep open as it is the only motorized connector from Stemple to Flesher. (5) Trail U417, add trail as it would complete the only single track loop in the Southern part of the project area. (6) Add new connectors in Hogum Creek,

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	Lincoln Gulch, and Long Point areas. (7) Creation of new connector U-new-4043, which will enhance riding opportunities in the Beaver Creek Area and connectors U103, U412, and U104 that would allow a ride into the Cool Lakes area. (8) Keep connector open from Meadow Creek Road to the A1 Road area. (9) Construction of proposed connectors 1481J1 and 1841D1. (206.1, 239.11, 239.12, 239.13, 239.14, 248.1)
	Response: Thank you for your suggestions. We considered them as follows:
	1) This is addressed by alternatives 1 and 2
	2) This is addressed by alternatives 1, 2 and 4
	3) This is addressed by alternatives 1 and 2
	4) This is addressed by alternatives 1 and 2
	5) This is addressed by alternatives 1 and 2
	6) This is addressed by alternatives 2, 3 and 4
	7) Connector routes in the Beaver Creek area is addressed by alternative 2, 3 and 4. Connectors in the Cool Lakes area were considered but ultimately dismissed from detailed analysis. Some of these routes cross private land and the Forest Service does not have jurisdiction to alter them. Sensitive wetland habitat occurs in this area as well that would be damaged by increased use.
	8) This is addressed by alternatives 2, 3 and 4
	9) This is addressed by alternatives 2, 3 and 4
Appendix C-Road Details by Alternative	PCS 330: The Forest Service should refer to Appendixes A, B, and C for specific ratings of routes on Ltr291. (227.16)  Response: This is the same as PCS 324. The commenter refers to a system of road ratings prepared by his organization. The Forest Service used its own rating system to determine the ratings of roads and motorized trails within the plan area.
	PCS 331: The Forest Service should consider that increasing restrictions on motorized use of trails and roads will result in a cumulative effect of increased erosion on the roads that remain open because they will receive increased. Cumulative effects could also result from proposed non-winter actions to winter actions (15.4, 248.2)
Appendix D-Cumulative Effects	Response: For transportation, alternative 1 would continue to disperse traffic across the forest. Alternatives 2, 3 and 4 through the closure of roads would shift the use to different, more concentrated areas of the forest. This would necessarily shift the maintenance requirements to those areas receiving more use. A section has been added to chapter 2 that describes how maintenance, monitoring and implementation would occur following a decision on this project. Maintenance would help to mitigate erosion concerns on open roads as addressed in the hydrology and soils reports. Best Management Practices as discussed in Chapter 2 of the EIS include specific erosion control measures on open roads.
	Cumulative effects are considered for each resource as described in chapter 3 and appendix D. A summary of the comparison of effects between alternatives is shown at the end of chapter 2.
Appendix D-Cumulative Effects	PCS 332: The Forest Service should re-examine the cumulative effects caused by motorized vehicle use and compare them

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	to the cumulative effects caused be natural processes including fires, flooding, and natural levels of erosion as the currently, motorized vehicle users are being held to high, unnatural standard. (22.24)
	<b>Response:</b> The Forest Service has considered the effects of natural processes including fires, flooding, grazing and other ongoing sources of erosion on the forest. By far, the major source of erosion from anthropogenic sources on the forest is from roads.
Appendix D. Cumulativa Effects	PCS 333: The Forest Service should examine the socio-economic cumulative effects as required under NEPA resulting from the increasing restriction of motorized vehicle use on the forest, including the CDNST, in that there can be no net loss of recreational opportunities. Large areas are being closed to motorized use regionally and nationally and is creating and adverse cumulative effect to motorized users; other plans and actions in the area that we have suggested should be considered in the analysis of cumulative effects (22.26, 22.52, 22.53, 22.114, 22.126, 22.129, 22.131, 22.142, 268.41, 268.52, 268.53, 268.58)
Appendix D-Cumulative Effects	<b>Response:</b> The range of alternatives, including the newly-added alternative 4, includes a mix of management approaches from fewer to more motorized trail opportunities in relation to the existing condition. Recreational opportunity has a different meaning depending upon each individual's interests and beliefs. Socioeconomic effects and overall effects to recreation opportunities are discussed in chapter 3 of the EIS. Patterns of use may change depending on the alternative selected, when closing some trails and opening up others.
Appendix D-Cumulative Effects	PCS 334: The Forest Service should provide an adequate analysis and discussion of specific effects from motorized vehicle use and the resulting cumulative effects of human activity resulting from the proposed Travel Plan. (46.66,)
	Response: See the specialists' reports for direct, indirect and cumulative effects analysis.
	PCS 335: The Forest Service should address how the proposed amendment will impact or improve elk vulnerability when the EIS shows their vulnerability as being constant across all of the alternatives, and arguably, lower than what the vulnerability rate is under the 4a standard. (21.4, 21.9, 21.12, 21.13, 21.16, 21.17, 21.18, 46.83)
	Response: Specific comments include used to create the broader PCS above include:
Appendix F-Forest Plan Amendment	"The current standard 4a addressed elk vulnerability in 2 ways, by limiting the harvest of bulls in the opening week of hunting, and by maintaining adequate bull/cow ratios. There is no analysis as to how the proposed security areas will maintain, improve, or reduce bull elk vulnerability (all alternatives are the same). Although the level of security is provided in Table F-6, and it changes per alternative, the elk vulnerability is the same for all3 alternatives. How is this possible? Isn't the purpose of the amendment to improve bull elk vulnerability? If the difference is not identified as per alternative, the purpose of the EIS is not being met, and it is unclear why the amendment is being proposed for implementation."
	In response to the above, the changes in percent security are a reflection of elk vulnerability and therefore are not the same

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	for all three alternatives (EIS Table F-5). However, additional analyses will be provided in the EIS to address this comment.
	"The long-term impact of the amendment is never discussed in the EIS. We contend that elk vulnerability will significantly increase with the amendment, due to the removal of the cover requirement in the Hillis security recommendations. The road closures will happen regardless of the amendment. As long as the cover requirement remains as is required by the current best science, the new road closures will create a significant benefit to elk vulnerability. Thus the no action alternative for the amendment is clearly the best for elk vulnerability, and this was never disclosed in the EIS."
	In response to the above comment, and as described for the previous comment, elk security improves in the action alternatives for most of the elk herd units due to the proposed road closures and seasonal restrictions (EIS Table F-2 Tables F-4 and F-5). Additional information will be provided in the EIS.
	"There appear to be problems with excessive bull elk vulnerability in the planning area as per table F-6, although this information is very sketchy. Since this is the reason for the amendment, why isn't there better information provided on current problems?"
	"Table F-6 gives a very sketchy summary of why elk vulnerability is a problem on the Forest and requires a change in the Forest Plan. There is almost no information provided to define why the current standard lacks effectiveness. If the existing situation cannot be understood and explained to the public, how are we to understand why the Forest Plan needs to be changed to something better, something that will correct the problem?"
	"Table F-6 notes that high elk vulnerability in the planning area is partly related to motorized use and past timber harvest. Would these problems exist if standard 4a was being implemented in the planning area?"
	In response to the above comments, additional information will be provided in the EIS.
Appendix F-Forest Plan Amendment	PCS 336: The Forest Service should provide the following information on the 4a standard: (1) What is the estimated economic cost for full implementation? (2) How has the effectiveness of the 4a standard been measured? (3) What are the constraints that the 4a standard place on forest management? (5) What has the forest done to implement some, or all, of the 4a standard? (21.7, 21.25, 21.36, 21.37, 21.38, 235.3)
	<b>Response:</b> Appendix F of the EIS describes the existing standard and the rationale and need for change. We received many comments on the proposed amendment and have updated this section of the EIS, including the alternatives considered, based on this input.
Appendix F-Forest Plan Amendment	PCS 337: The Forest Service should disclose the cumulative effects of timber harvest on elk security and its impacts under the proposed amendment. The effects of this should be disclosed such as whether this has resulted in a loss of cover or

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	bull:cow ratios, for example. More details are needed on how past and future timber harvest would affect elk under the existing standard and the proposed standard. (21.19, 21.27, 21.29)
	<b>Response:</b> We received many comments on the proposed amendment and have updated this section of the EIS, including the alternatives considered, based on this input. Cumulative effects are also discussed.
Appendix F-Forest Plan Amendment	PCS 338: The Forest Service should not adopt the proposed big game security amendment, and should ensure there is an alternative that keeps the 4a standard. This standard should only be removed if a complete scientific evaluation can support an alternate standard or amendment. For example, in the case of the Helmville Gould trail area, these herd units are meeting the current standards and do not justify motorized closure. This kind of proposal should be analyzed through a supplemental EIS and not as part of a project-level NEPA analysis as has been done. (21.6, 58.3, 61.1, 101.10, 107.4, 146.2, 149.4, 181.4, 235.2, 253.3, 266.3, 267.4, 271.2, 277.2, 279.3, 282.1,342.2)
	<b>Response:</b> The EIS states that the "[p]roposed new Forest Plan standard for big game security would not be implemented for alternative 1". Therefore, Alternative 1 (the No Action alternative) retains Forest Plan Standard 4(a) as a metric for consistency. Appendix F of the EIS describes the existing standard and the rationale and need for change. We received many comments on the proposed amendment and have updated this section of the EIS, including the alternatives considered, based on this input.
	PCS 339: The Forest Service should define if the direction in this amendment will be classified as a standard or a guideline. (21.2)
Appendix F-Forest Plan Amendment	Response: Comment 339 is in response to language appearing in the Summary Section of the EIS and refers to pages S-8 and S-9. The EIS at page S-8 refers to the "[p]roposed new Forest Plan standard for big game security" The EIS at page S-9 refers to the elk security methodology for analyzing effects to elk security and the habitat effectiveness methodology for summer range. Both of these methods are utilized in the EIS as analysis tools only and as such are used to compare alternatives. The EIS on page 15 states that "[t]he proposed programmatic plan amendment would establish a new standard [emphasis added] for elk security for those herd units within the planning area". The intent of the amendment as released in the EIS is to replace existing Forest Plan Standard 4(a) with a standard. However, we are still in the analysis phase and a final decision has not been made relative to the Forest Plan amendment. This will be clarified in the EIS.
	<b>PCS 340:</b> The Forest Service should clarify if the 35% summer habitat hiding cover standard will apply to the elk fall range as well under the proposed forest plan amendment. (21.30)
Appendix F-Forest Plan Amendment	Response: The programmatic amendment is proposed to replace Forest Plan Standard 4(a) only. Standard 3 – which addresses the 35% hiding cover on summer range – is not subject to the proposed amendment. The EIS states that "[b]ased on preliminary analysis of the alternatives, we identified the potential need for a Forest Plan programmatic amendment regarding the standard for the big game security index (Forest Plan standard 4a) as part of this proposal" and "[i]mplementing either of the action alternatives would require a programmatic plan amendment to the Helena National Forest Plan regarding the standard for big game security index" (EIS Appendix F. Project consistency with Standard 3 can

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	be found in the EIS
	Appendix F of the EIS describes the existing standard and the rationale and need for change. We received many comments on the proposed amendment and have updated this section of the EIS, including the alternatives considered, based on this input.
	PCS 341: The Forest Service should include a habitat effectiveness standard in the proposed forest plan amendment that will manage road densities outside of the security areas. (21.31)
Appendix F-Forest Plan Amendment	<b>Response:</b> Managing road densities outside of the security areas is not within the scope of this project's purpose and need. Appendix F of the EIS describes the existing standard and the rationale and need for change. We received many comments on the proposed amendment and have updated this section of the EIS, including the alternatives considered, based on this input.
Appendix F-Forest Plan Amendment	PCS 342: The Forest Service should identify all of the motorized routes on the forest, re-evaluate the boundaries they have identified, and provide maps of the "fall use areas" and security areas that the proposed amendment identifies for elk. The Forest Service should incorporate the data from FWP biologists regarding total elk numbers and bull:cow ratios based on survey data. (21.40, 21.43, 21.44, 247.11, 247.37, 247.76, 247.77)
	<b>Response:</b> Appendix F of the EIS describes the existing standard and the rationale and need for change. We received many comments on the proposed amendment and have updated this section of the EIS, including the alternatives considered, based on this input. Additional information, including maps, will be provided in the EIS including information pertaining to the following comments included in this PCS:
	"however, any analysis of elk vulnerability and habitat security must take into account all routes open to any public or administrative motorized use during any portion of the fall hunting season, defined as the period between 9/1 and 12/1 each year. Similarly, analyses of summer habitat effectiveness should consider the period between 5/16 and 8/31. Seasonal road closures should correspond to these dates and should be consistently adopted throughout the Plan area."
	"FWP strongly disagrees with the boundaries as they are presented in the EIS, because FWP has documented extensive and continual elk habitat use far from the Forest Service boundary during both fall and winter. A much broader area must be incorporated into the existing elk herd units to capture year-round and/or fall use areas of elk."
Appendix F-Forest Plan Amendment	PCS 343: The Forest Service should identify how the development of mountain bike trails going through elk security areas will impact elk vulnerability. (21.42)
	<b>Response:</b> Additional analysis is provided in the wildlife report and EIS more specifically addressing the effects of various recreational activities including mountain bikes.

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Appendix F-Forest Plan Amendment	<b>PCS 344:</b> The Forest Service should reference the scientific papers that discuss elk security variables. These papers can be found listed in comment 80 from contact 46. Based on these findings, the Forest Service should screen elk habitat features from literature (e.g. Christensen, et al 1993) and closed during late spring and summer to comply with standard 4b. (46.23, 46.80)
	<b>Response:</b> Appendix F of the EIS describes the existing standard and the rationale and need for change. We received many comments on the proposed amendment and have updated this section of the EIS, including the alternatives considered, based on this input. This additional analysis will incorporate any additional relevant science.
Appendix F-Forest Plan	PCS 345: The Forest Service should list the specific page numbers that correspond to the scientific references they are citing. (21.15)
Amendment	<b>Response:</b> Thank you for your suggestion. While page numbers do help narrow the search for specific supporting statements, it is not however, a requirement. In some cases there are numerous pages that may provide support or an entire document may provide the supportive basis for an approach or conclusion.
Appendix F-Forest Plan Amendment	PCS 346: The Forest Service should revise the proposed amendment so that it is tailored to the local conditions and needs of the Helena National Forest.  Response: Appendix F of the EIS describes the existing standard and the rationale and need for change. We received many comments on the proposed amendment and have updated this section of the EIS, including the alternatives considered, based on this input.
Appendix F-Forest Plan Amendment	PCS 347: The Forest Service should delay the revision and decision on this Travel Plan until a revised Helena National Forest Plan is completed. (58.2, 58.4)  Response: The following comment is also applicable and will be further addressed in the EIS. "The Blackfoot Travel Plan alternatives present in the EIS rely on modifications to the elk security standards to ensure compliance with the Helena Forest Plan. As such, evaluations of the various action alternatives are not completely valid because they do not describe and evaluate alternatives that would achieve consistency with the existing standards."  The EIS points out that "[t[he herd units that fail to comply with the standard do not support abnormally high open road densities. Rather, hiding cover percentages are low throughout much of the Blackfoot landscape that in five of the six herd units currently out of compliance, even if all open roads managed by the Forest were eliminated, they would still not comply with standard 4a. The sixth unit, Beaver Creek-Lincoln would require closure of 51 percent of its roads (approximately 37 miles) to achieve compliance."  The preparation of Travel Plans is an established National Forest System planning activity mandated by the 2005 Travel Management Rule. Delaying travel planning until a Forest Plan revision is complete is not feasible.

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	Appendix F of the EIS describes the existing standard and the rationale and need for change. We received many comments on the proposed amendment and have updated this section of the EIS, including the alternatives considered, based on this input.
	PCS 348: The Forest Service should disclose the scientific data they are using to determine elk hiding cover since they imply in the EIS that the need for hiding cover on the fall elk winter range is outdated science. (21.23, 21.24)
Appendix F-Forest Plan Amendment	<b>Response:</b> The comment used to develop this more general PCS was based on the following comments: "Table F-7 is an interesting summary. What it shows that the Forest Service is changing the Forest Plan, downgrading it, so that the elk vulnerability standard can now be met. The new proposed standard can be met without any actual changes on the ground, including proposed road closures! So all you are doing is getting rid of the requirement to provide hiding cover for elk in the fall."
	The EIS at 500 implies that hiding cover, including on fall elk range, is outdated science, which justifies the removal of this requirement in the Forest Plan. Yet Hillis et al. (1991) requires cover in elk security areas, as does Christensen et al. (1993), or Region 1 direction. What specific science, cited to pages of reports please, has replaced these science reports as the current best science for managing elk vulnerability?
	In response to the first comment, the EIS concludes that "elk security areas provide a means of gauging elk vulnerability/ security that is sensitive to changes in open, motorized route configuration. This allows a more realistic assessment as to potential impacts of travel management proposals in different herd units than the previous HFP Standard (the big game security index), which shows no difference between any of the alternatives in terms of Forest Plan compliance" (EIS) and "[t]able F- 7 provides a comparison of the current Big Game standard (HFP #4a) and the proposed new standard in terms of how these two methods classify elk herd units for compliance with the Forest Plan under different Travel Plan alternatives". (EIS) And that "[i]n spite of the fact that the Travel Plan Decision closes several miles of roads to vehicle access during the hunting season, HFP standard #4a indicates that there is no improvement in elk security in any unit." (EIS)
	In response to the second comment, the EIS at page 500 states that "[o]ne of the objectives of the Blackfoot Travel Plan is to avoid imposing outdated management direction contained in the Helena Forest Plan (USDA 1986) on the road and trail system of the Blackfoot landscape". And that "[p]art of the process of balancing the need for road access with the security requirements of big game animals entails developing a system of habitat assessment and management guidance that can accurately depict the security status of elk in a given area and appropriately address any problems detected. Experience with the Forest Plan over the last couple decades has led HNF wildlife biologists to conclude that elk security standards in the Plan—particularly big game standard 4a (HFP, pp. II/17 – II/18)—do not accurately reflect the habitat needs of elk during the hunting season and have required road closures that restrict travel but often do not improve elk security" Appendix F provides the rationale for the proposed amendment (EIS).

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	Furthermore, the EIS describes that Hillis and others "cautioned, however, that this set of parameters was designed for densely-forested western Montana elk habitat, and—particularly for areas further eastward where forest cover may be limited—security requirements should be evaluated on a site-specific basis and guidelines adjusted so results make biological sense in a local setting (Hillis et al. 1991, p. 40; Christensen et al. 1993, p. 5). The underpinnings of this methodology— i.e., elk tend to avoid open, motorized routes during the hunting season—has been reinforced through the work of Unsworth and others (1991, 1993), Rowland and others (2000, 2005), and Proffitt and others (2011), among others. Furthermore, biologists from MFWP and the Forest Service recently compiled recommendations for elk habitat management based on the best current available information that includes a consideration of the Hillis method in measuring elk security." (EIS) Specific page numbers for additional references will be provided in the EIS.
Appendix F-Forest Plan	PCS 349: The Forest Service should add the impacts of the bark beetle and fires as elements that have prevented the 4a standard from being met. (21.8)  Response: The EIS states that "the HNF is put in the position of never being able to meet standard #4a in these herd
Amendment	units in the foreseeable future (especially with hiding cover continuing to decline from massive beetle kill)". (EIS)  Appendix F of the EIS describes the existing standard and the rationale and need for change. We received many comments on the proposed amendment and have updated this section of the EIS, including the alternatives considered, based on this input.
Appendix F-Forest Plan	PCS 350: The Forest Service should explain why the 40% hiding cover standard versus the 90% hiding cover standard at 200 feet is being used to measure cover, how the decision will impact the pine beetle, and the management of landscape cover. (21.28)
Amendment	<b>Response:</b> Appendix F of the EIS describes the existing standard and the rationale and need for change. We received many comments on the proposed amendment and have updated this section of the EIS, including the alternatives considered, based on this input.
Appendix F-Forest Plan Amendment	PCS 351: The Forest Service should explain the present and projected impacts to elk security and vulnerability, how the proposed amendment will measure these, how the reduction or elimination of cover will affect the security and vulnerability of elk, and if the 30% standard will apply to the entire forest or just the fall use areas. (21.21, 21.25, 21.41)
	<b>Response:</b> Appendix F of the EIS describes the existing standard and the rationale and need for change. We received many comments on the proposed amendment and have updated this section of the EIS, including the alternatives considered, based on this input.
Appendix F-Forest Plan Amendment	PCS 352: The Forest Service should include an alternative that uses the full and correct Hillis et. al definition and includes contiguous blocks of cover within roadless blocks. (21.10, 21.11)
	<b>Response:</b> Appendix F of the EIS describes the existing standard and the rationale and need for change. We received many comments on the proposed amendment and have updated this section of the EIS, including the alternatives

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	considered, based on this input.
Appendix F-Forest Plan Amendment	PCS 353: The Forest Service should disclose the long-term impacts of the proposed amendment and its implementation since it is a non-binding standard. (21.22, 21.34)  Response: Appendix F of the EIS describes the existing standard and the rationale and need for change. We received
	many comments on the proposed amendment and have updated this section of the EIS, including the alternatives considered, based on this input.
	<b>PCS 354:</b> The Forest Service should describe in the EIS why elk security areas are not required to be well distributed. (21.39)
Appendix F-Forest Plan Amendment	<b>Respons</b> e: The proposed amendment is applicable at the elk herd unit level; elk herd units are well distributed across the planning area (EIS, Figure 2 and Appendix F). Appendix F of the EIS describes the existing standard and the rationale and need for change. We received many comments on the proposed amendment and have updated this section of the EIS, including the alternatives considered, based on this input.
	PCS 355: The Forest Service should increase the security areas beyond the 250 acre blocks identified in the amendment, ensure the blocks are located away from roads, and identify what science (cite page numbers in the reference) they are using to determine the 'proxy' for bull elk vulnerability in these large unroaded areas with or without cover. How elk security is being defined is important to disclose. The Forest Service should consider blocks of 1,000 to 1,200 acres in size instead of 250 acres. (21.5, 21.32, 68.14)
	Response: The comment as excerpted in '130530_BkftAllCommentwithnumbers' is three-fold as follows:
Appendix F-Forest Plan	"Please cite the science that is being used to develop the "proxy" for bull elk vulnerability as large blocks of unroaded areas, with or without cover? Please reference the specific pages of those science reports, instead of simply citing the entire document."
Amendment	"There is no discussion as to the level of total roads, as well as distance from open roads and levels of hiding cover that would be included in defining elk security. The Hillis report notes that closed roads in security areas likely increase elk vulnerability, that landscapes with low cover and low topographic relief will require more security than landscapes with high cover and high topographic relief, and that the quality of a security block will be improved by increased distance to open roads. The amendment's limitation of security areas to just 250 blocks of areas with no open roads is far too limited to provide suitable management of these areas, even if the cover requirement had been included."
	"Appendix F. The discussion centered on patch size (250 acres is the recommended standard in the Draft Plan). Distance from road of patches appears to be appropriate for the forest conditions on the Lincoln Ranger District. Perhaps 1,000 or 1,200 acres is a more appropriate patch size."

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	In response to the first comment, Hillis and others (1991, pp. 39-40) provide the basis for the proposed amendment.  Additional page number references will be provided in the EIS.
	In response to the second and comments, additional analyses will be provided in the EIS. Appendix F of the EIS describes the existing standard and the rationale and need for change. We received many comments on the proposed amendment and have updated this section of the EIS, including the alternatives considered, based on this input.
	<b>PCS 356:</b> The Forest Service should focus on improving elk security habitats by closing/removing roads and ORV routes, and designating larger habitat areas that consist of gentler terrain with slopes less than 30%. (46.67, 46.76, 46.77)
Appendix F-Forest Plan Amendment	<b>Response:</b> Additional components of this comment include consideration of non-motorized landscapes rather than patches of cover at a minimum distance from open roads – additional analysis will be provided in the EIS to address this comment. Another component of this comment includes establishment of 25,000-50,000 acre blocks of non-motorized areas – this too will be addressed in the EIS.
	Appendix F of the EIS describes the existing standard and the rationale and need for change. We received many comments on the proposed amendment and have updated this section of the EIS, including the alternatives considered, based on this input.
Appendix F-Forest Plan Amendment	PCS 357: The Forest Service should consider that the reason that elk herd units are above objective is because of elk displacement from the forest to private lands and not due to the present security plan of the forest. Rather than lowering the security standard, the Forest Service should evaluate controlling the objective within measures that will maintain elk security and the health of the forest. Displacement of cow elk to private lands during the hunting season is already occurring and seriously reduces effective population control capability by MFWP. (46.28, 46.29, 46.68, 46.69, 60.4)
	Response: The EIS states that "[e]ach EMU and associated HD has its unique primary challenges that relate to management of elk. Although varied by HD, overall challenges include the impacts of predation on elk populations, restricted hunting access, and extensive motorized use. Refer to the Montana Elk Plan (2004) for more information". (EIS). See also pages 181-183 for a discussion on the status of elk by Elk Management Unit. Additionally, the Forest Service is not responsible for controlling elk objectives.
	Specific comments used to develop this PCS are as follows and will be used in the EIS as follows:
	"The analysis of current elk security conditions do not convey that the current elk security definition is "outdated" as stated in the EIS, but simply that the Helena Forest has not managed the transportation network to provide enough elk security. Proposing to adopt a 20 year old untested Hillis Paradigm as the appropriate elk security science is unjustified and unprofessional."
	"We dispute that hunting security "insensitive to changing road densities" and is less important because elk numbers are at

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	or above objective n some hunting districts. Lyon (1963) long ago established the relationship of road density to elk habitat use."
	"The Forest has failed to document the "inaccuracy" of the nature of elk security as expressed in the current elk security standard. Why was this Standard the best available science when adopted (with supporting published papers) when the Forest Plan was developed but is now inaccurate? How is the Hillis Paradigm more accurate, given it was developed for heavily vegetated continuous canopy conditions and the authors caution about its applicability elsewhere? We strongly disagree with these conclusions. We also disagree that 4a places "unnecessary and impractical constrains on travel management" Given that the Helena has presented Alternative 3 as a viable alternative demonstrates the Helena could easily make progress in meeting the 4a standard without being "unnecessary and impractical". We also find the statement that the "recently developed elk security area provides a reasonable accurate picture of elk security across the landscape" blatantly ignores available elk science. There is no analysis nor concurrence by the Hillis Paradigm authors that this methodology is applicable to the Helena National Forest vegetative or topographic conditions. There is no discussion of other elk security methodology in this EIS that may be more applicable to Helena conditions. We have listed a few of the more recent elk security related papers which should have been analyzed and addressed as part of any elk security amendment process that are more current than the 20+ year old Hillis Paradigm. The evidence that substantial numbers of elk move onto private lands early in hunting seasons demonstrates that current elk security is inadequate in the Blackfoot Travel Plan area."
	"We ask for supporting concurrence by recognized elk scientists as to the state of elk security in the Travel Plan area."
	"You appear to be trying to correlate two issues ("excess" security cover and high elk numbers) that likely have no relationship at all. The real reason that elk numbers are high in so many hunting districts within the Helena National Forest is not because there is an excess of hiding cover; instead, it is because so many elk are finding sanctuaries on private land adjacent to the National Forest where public access is severely limited by landowners or where private land holdings block public hunter access to the Helena National Forest. The Montana Department of Fish, Wildlife, and Parks has identified this problem as the major reason that elk numbers are exceeding the elk plan goals in many hunting districts statewide."
	"However, the EIS does not document exactly why the elk herd exceeds objectives."
	Appendix F of the EIS describes the existing standard and the rationale and need for change. We received many comments on the proposed amendment and have updated this section of the EIS, including the alternatives considered, based on this input.
Appendix F-Forest Plan Amendment	PCS 358: The Forest Service should consider revising the proposed amendment analysis so that it is not relying so heavily on the use of the Hillis Paradigm. This paradigm was created for west-side forests and has not been validated for the Helena where conditions are different. The Forest should acknowledge that they simply have not managed their transportation network to provide for elk security. Reducing elk security makes little sense, especially if it risks contributing to other adverse

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	effects, such as perpetuating open road densities that contribute sediment to streams. (46.25, 46.70, 46.71, 46.95, 240.6)
	<b>Response:</b> Thank you for your suggestion to revise the proposed amendment analysis. The EIS describes other alternatives considered for the amendment as well as updated analysis of the effects of the proposed amendment.
	PCS 359: The Forest Service should explain what will be done on the Helena Forest to demonstrate the quality and differences in elk security and vulnerability in various terrain features, the vertical relationship of open roads to the cover patch, the ease of access by hunters due to open vegetation or old road prisms, and the density of the cover patch. (21.26, 46.72)
Appendix F-Forest Plan Amendment	<b>Response:</b> Additional analyses will be provided in the EIS. Specifically, we will address the following questions raised in the comment: "What validation has occurred to demonstrate that most elk remain in Blackfoot Travel Plan area cover patches only ½ mile away (Hillis Paradigm) from the presence of motor vehicles during the hunting season? What has the Helena done to demonstrate the quality of elk security given the terrain features present or lack thereof, vertical relationship of open roads to the cover patch, ease of access by hunters due to open vegetation or old road prisms, or the density of the cover patch."
Appendix F-Forest Plan	<b>PCS 360:</b> The Forest Service should conduct a thorough analysis of hiding and thermal cover for all patches attributable to elk security, explain what criteria is used to define elk cover, how that criteria gets applied to each potential cover area on the forest, and if the Travel Plan will even have an effect on hiding cover. (46.73)
Amendment	<b>Response:</b> The EIS describes the existing condition for hiding and thermal cover as well as effects to hiding and thermal cover associated with the alternatives. Additional information will be provided in the EIS to answer the following question raised as part of this comment: "What criteria are used in describing elk cover and how was it analyzed and applied to each potential cover patch?"
	PCS 361: The Forest Service should disclose the validation they have that supports their position that elk will remain within a w50 acre patch during hunting season. (46.75, 46.82)
Appendix F-Forest Plan Amendment	<b>Response:</b> Additional information will be provided in the EIS in response to the above as well as to the following: "We find the proposed application of the big game security amendment to only apply to the general rifle season as ignoring the displacement impacts by bowhunters. There are about 40,000 bowhunters in Montana and most hunt at least part of the season on public lands, including the Blackfoot Travel Plan area. Grigg (2007) and others have documented the displacement of the majority of elk to private lands due to bowhunting activity. The distribution of bowhunters into the most secure habitats likely exceeds the distribution of rifle hunters because of longer hunting daylight in late summer/early fall and better travel conditions with a general lack of snow. We strongly request any elk security amendment apply to bowhunting and general hunting season equally."
Appendix F-Forest Plan Amendment	PCS 362: The Forest Service should disclose the evidence that supports the modification to the definition of elk security, provide documentation that the new definition and accompanying standard will benefit public land elk hunting, and confirm

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	that the best available science on elk research results (including that on the Gallatin and Starkey Experiment Station) were used in supporting the modification. There is no EIS discussion describing what motorized transportation network existed when the Helena Forest Plan was initially approved, nor how close the Blackfoot was to meeting the elk security standard at that time of initial plan implementation. Did previous project decisions since the 1986 Plan approval include timber sales, special use permits and transportation decisions properly address how these decisions address meeting Standard 4A? Or did the failure to address in these project decisions cumulatively aggravate the present depleted elk security situation? If so, then why should the Forest propose or be permitted to now "kick the can down the road" by proposing a more lenient elk security standard instead of correcting the cumulative effects of previous Forest Service decisions that took the Forest further away from meeting the elk security standard? (46.20, 46.79, 46.81)  **Response: Thank you for your suggestion to revise the proposed amendment analysis. The EIS describes other
	alternatives considered for the amendment as well as updated analysis of the effects of the proposed amendment.
Appendix F-Forest Plan Amendment	PCS 363: The Forest Service should maintain the existing Elk Security Standard until the following elements are processes are completed: (1) A new, open, public process including participation from FWP biologists, to use the most up to date science in determining an area for revision of the standard; (2) Full agreement and consistency of any new proposed elk security standard amongst all of the four eastside forests and all pertinent regions of MFWP; (3) Outside peer review from recognized elk scientists and biologists to concur that a proposed standard is beneficial for elk security with vegetation conditions, topography, and mixed ownership; (4) a proposed standard would ensure that the condition and quality of elk security would result in the majority of public land elk on any landscape would remain on public land during the hunting season and the age distribution of male elk would meet the goals of FWP following the hunting season; (5) a proposed standard would apply equally to the general season and archery season; (6) If full ORV regulations are not enforceable, non-compliance of regulations must be factored into the effectiveness of the elk security standard; (7) As soon as a herd unit is defined as deficient, action to restore/improve elk security must ensue; and (8) screen all proposed motorized routes. (45.85, 46.26, 46.84, 46.86, 192.10)
	Response: (1) Forest Service staff have participated with FWP biologists in development of the proposed amendment (See project record); (2) This is outside the scope of this project; (3) the proposed amendment is derived from peer reviewed literature (See cited references Hillis et al. 1991, Christensen et al. 1993, Unsworth et al. 1991 and 1993, Rowland et al. 2000 and 2005, and Proffitt et al. 2011); (4) Forest staff are currently working with FWP biologists (See project record); (5) Alternative 3 includes consideration of archery season in road closure time frames; (6) outside the scope of the project; and (7) additional information will be provided in the EIS. Additional information will be provided in the EIS including a consideration of the following comment embodied in this PCS: "This amendment seems to be one sided, with no discussion on the ramifications to other uses of the forest."
Appendix F-Forest Plan Amendment	PCS 364: The Forest Service should not go through with the road closures to the Granite Butte area in T13N R7W for an elk hiding district as there are plenty of roads available for access to private mining claims, and these roads have been in place during times that have seen increased elk numbers. The evidence presented does not warrant year round road closures to the Granite Butte area". (192.1, 192.9)

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	<b>Response:</b> Thank you for your suggestion to not close any roads in the Granite Butte area. This is addressed by alternative 1. The EIS also includes updated analysis of the effects of the project on elk and the additional analysis of the forest plan amendment in appendix F.
Appendix F-Forest Plan Amendment	<b>PCS 365:</b> The Forest Service should adopt the proposed Forest Plan Amendment regarding elk security, as it is superior to the current standard and will provide an increased benefit to the ecosystems and habitats for wildlife in the forest. (54.5, 158.1)
	Response: Thank you for your support of the proposed Forest Plan amendment.
Appendix F-Forest Plan Amendment	PCS 366: The Forest Service should adopt Alternative 3 in regards to elk security as it will increase elk security, reduce road density and improve the overall habitat for elk. (58.10, 185.3, 247.12)
	Response: Thank you for your support of alternative 3.
Appendix F-Forest Plan Amendment	PCS 367: The Forest Service should not adopt the Forest Plan Amendment regarding big game security, nor should they have included it in the Travel Plan process. By doing so, you are not allowing an individual NEPA process for this amendment to ensue, are not providing the most accurate and necessary research and information for this amendment, and are requiring the adoption of this amendment without any other elk management alternatives to be determined. (46.5, 46.21, 60.5, 71.7)  The 4a effects discussion inappropriately relies on an assumed adoption proposed elk security amendment that has not benefited from public review nor comment. It appears this reliance predisposes the elk amendment decision as necessary without Alternative elk security amendments being proposed. Relying on a 20+ year old untested "Hillis Paradigm) as the basis for an elk security amendment ignores (1) use of 20 years of elk security research conducted since the late 1980s and 2) caution by the authors of the Hillis Paradigm paper that it was developed for use on west side heavily vegetated landscapes and is not applicable to other areas. In addition, the Helena's acknowledgement that forest vegetation is thinning due to insects and disease lends even more doubt that the Hillis Paradigm is appropriate for a naturally thinner vegetative pattern with larger natural openings and a thinning vegetative condition and trend. Why were no other potential elk vulnerability standards using more recent science neither analyzed nor proposed?  **Response: The ElS acknowledges the Hillis et al. timeframe as well as its geographic applicability: "Hillis cautioned,"
	however, that this set of parameters was designed for densely-forested western Montana elk habitat, and—particularly for areas further eastward where forest cover may be limited—security requirements should be evaluated on a site-specific basis and guidelines adjusted so results make biological sense in a local setting (Hillis et al. 1991, p. 40; Christensen et al. 1993, p. 5). The underpinnings of this methodology— i.e., elk tend to avoid open, motorized routes during the hunting season—has been reinforced through the work of Unsworth and others (1991, 1993), Rowland and others (2000, 2005), and Proffitt and others (2011), among others. Furthermore, biologists from MFWP and the Forest Service recently compiled recommendations for elk habitat management based on the best current available information that includes a consideration of the Hillis method in measuring elk security. "(EIS)

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	In response to the following comment, Standard 4(a) does not include consideration of elk calving and nursery areas. The elk calving and nursery area standard is 4(b) (Forest Plan II/18). "We disagree that the Forest can conclude this standard has been met without providing some assessment of motorized routes to likely elk calving and nursery areas. There is no indication nor documentation the Forest used available knowledge or data in determining where calving and nursery areas are known to occur. Did the Forest consult or specifically request such calving or nursery site specific information from MFWP or local forest users?"
	Additional analysis will be provided in the EIS that will also include the following comment not captured above: "The proposed application is does not reflect current scientific knowledge on elk response to hunting pressure nor all-terrain vehicles. For example, Wisdom (2007) found elk displaced up to 0.93 miles from the presence of an all-terrain vehicle, yet the Hillis Paradigm includes hunting security areas as little as ½ mile from an open road or ORV trail. We note the authors of the Hillis Paradigm caution that the Paradigm was developed only for densely vegetated west- side Montana landscapes and cautioned its applicability to other landscapes. The proposed application of the Hillis Paradigm becomes even less appropriate as the forest becomes thinner due to tree mortality, which the Forest has acknowledged has and continues to occur. Thus the effectiveness of a 250 acre patch size for elk security is far less effective in thin or thinning stands of canopy when hunters can see much further than the thickly multistoried stands of timber found on the Lolo when the Paradigm was developed. Elk in thinner canopies also feel less secure, move with less disturbance and move further distances away from disturbance."
	The Forest Plan Amendment presented in the Final EIS will consider alternative amendments. The proposed Forest Plan Amendment is project-specific to this travel plan analysis, and is fully evaluated in the travel plan NEPA process.
Appendix G-Maps	PCS 368: The Forest Service should consider providing free travel plan maps in print and on the website with road uses and their definitions clearly marked on the map. Maps need clearly show what roads and trails are open for access. (15.2, 118.1, 170.5, 342.7)
	<b>Response:</b> Thank you for your comment. As part of the Planning Rule, a Motorized Vehicle Use Map will be made available to the public free of charge upon completion of this site specific travel planning effort. While convenient to have the maps posted on the Forest webpage; this is not part of the decision; however, will be taken into consideration at a later point in time.
Appendix G-Maps	PCS 369: The Forest Service should consider using more than just three maps or have more distinguishable details since currently the maps look too similar, not labeled with current used names, and difficult to distinguish such as colors being too similar for different road types in order to make changes/differences more visible. Additionally the maps should include security areas, and unroaded areas to track changes between alternatives. (22.116, 50.1, 58.26, 76.1, 118.3, 161.22, 180.3)
	<b>Response:</b> The EIS provides 13 different maps in appendix G to show various aspects of the proposed alternatives. However, we recognize it is difficult to portray all road and trail details at appropriate scales and colors for a project of this

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	size. We will consider the use of different colors or legends for maps in the EIS to ensure the ability to distinguish differences among the alternatives. We will also ensure that various maps used in the analysis are available in the project record showing security for elk, grizzly bears and other wildlife species.
Appendix G-Maps	PCS 370: The Forest Service should fix the following in the project maps: (1) A loop from the Cellar Gulch OHV Trail to the Marsh Creek Road is shown as going from Cellar Gulch OHV Trail and the Helmville-Gould Trail #467. (2) On Alternative 3 map the CDT between the Cellar Gulch and the junction with Helmville-Gould Trail #467 is displayed as a (dead end) motor vehicle route but is acutely between Cellar Gulch (ATV track) and Marsh Creek Road. From Cellar Gulch to (and including) Gould- Helmville, the trails are non-motorized, available for foot, horse and bicycle uses. (3) update 1892-D1 route on the map with what is actually on the ground. (58.40, 98.12)
	<b>Response:</b> Thank you for these suggestions. The first and second concern will be considered in updated maps for the EIS; part of this situation has to do with the fact that roads that are on the Helena National Forest don't show up on the maps because they are not within the planning area. The third concern has been addressed and is reflected in updated maps for the EIS.
Appendix G-Maps	PCS 371: The Forest Service should consider making a map just for CDNST to see the various differences the alternatives so people are more easily able to determine areas of concern. (114.23, 283.21)
урронаж с тиарс	<b>Response:</b> The EIS includes 13 different maps in appendix G, including some specific to proposals for the CDNST by alternative.
NEPA Information Request	PCS 372: Information Request (see Comments document pg. 238) (18.1, 21.1, 35.1, 37.1, 57.1, 151.1)  Response: The Forest Service responded to this information request in a timely manner.
NEPA Sufficiency	PCS 373: The Forest Service should consider completing a separate Supplemental EIS to the original NEPA EIS prior to establishing the Continental Divide National Scenic Trail access proposals in the EIS as required by CEQ Regulations at 40 CFR Part 1502.9(c). Since the preparation, comment, appeal, and impact elements to be considered in a Forest Plan SEIS under the 36 CFR Part 216 regulations are different than for a travel-related Project EIS under 36 CFR Part 212, the incorporation of the amendment proposal within the project-level NEPA review which depends on that Plan amendment is inappropriate. (268.57)
	Response: The objective of this analysis is to identify the transportation system necessary for management of the Helena National Forest. This plan falls under 36 CFR 218 and 219 regulations. The IDT analyzed the effects of each alternative for the CDNST appropriately and followed laws, policies, and procedures that are in place. The final decision will include future management direction that will also comply with laws, policies, manual direction, and procedures that apply.
NEPA sufficiency	PCS 374: The Forest Service should clarify and include in the EIS the study of personal, commercial, community, county state and national impact to the user-base prior to a decision. (203.3, 203.5, 255.3, 255.7)

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	<b>Response:</b> It is unclear what user base this comment refers to. It is also unclear what kind of study the commenter is requesting. Each specialist analyzes the effects to their respective resource, discloses those effects and offers resource protection measures to minimize or eliminate negative or harmful effects.
	PCS 375: The Forest Service should conduct and include NEPA analysis on sediment on Forest Service Roads from culverts and ditches (point source pollutants) prior to project approval to comply with NEPA, APA, and the Clean Water Act. (167.43)
NEPA sufficiency	<b>Response:</b> Where survey data exist, sediment delivery from roads was evaluated for planning area roads. This effort included rare instances where culverts and ditches drained directly to a waterbody. Given the number of miles of road covered in this decision, there may be instances where drainage from a culvert or ditch to a stream was not modeled for this report. Regardless the Supreme Court has recently ruled that sediment from ditches and culverts forest roads is not a point source.
	PCS 376: Forest Service is violating NEPA by proposing a forest plan amendment that is not driven by a need to reduce elk vulnerability but by a need to continue implementing multiple use projects. (21.14, 21.45)
NEPA Sufficiency	<b>Response:</b> We disagree that the proposed forest plan amendment is a violation of NEPA. Appendix F of the EIS describes the existing standard and the rationale and need for change. We received many comments on the proposed amendment and have updated this section of the EIS, including the alternatives considered, based on this input.
NEPA sufficiency	PCS 377: The Forest Service should consider conducting an impact study on removing motorized use near the CDNT prior to a decision. The Forest Service should also consider that proposed actions for closing motorized use should be based on site-specific data and reasons and not on Forest Plan consistency. (203.4, 268.84)
	<b>Response:</b> The EIS includes a site-specific analysis of the proposed changes to the CDNST under each alternative. These changes were evaluated based on the potential for effects to natural and cultural resources in addition to describing how proposed changes would meet the intent of the Forest Plan and other guiding direction.
NEPA Sufficiency	<b>PCS 378:</b> The Forest Service should consider meeting the NFMA, NEPA, and current National Forest Planning Regulations by keeping the elk standards unaltered and using the current elk science available prior to proposing a preferred alternative. (46.6)
	<b>Response:</b> This is addressed by alternative 1; the forest plan elk standards would not change under alternative 1. We have considered existing regulations and current science in the development of the Forest Plan amendment for the other alternatives.
NEPA Comment Period	PCS 379: The Forest Service should consider extending the comment period on the whole EIS to 90 days to avoid confusing dual comment periods (45 days or 90 days). The time period outlined in the 2012 regulations at 36 CFR Part 219 Subpart B and those in the January letter to the public appear to conflict and may lead to confusion as to which comment periods apply. (101.3, 101.4)

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	<b>Response:</b> The length of the comment period is determined by the CFR regulations. The EIS falls under 36 CFR 215/218 with a 45 day comment period and the Programmatic Plan Amendment is under 36 CFR 219 which has a 90 day comment period.
	PCS 380: The Forest Service should clarify and demonstrate the use of best available scientific information in the plan components, sustainability, public input, and monitoring program as required by the new planning rule in the process and decisions made during the planning process to inform plan decisions. (167.16)
NEPA Comment Period	<b>Response:</b> The IDT analyzed the effects of each alternative utilizing the best available scientific information and by following laws, policies, and procedures that are in place. The final decision will include future management direction that will also comply with laws, policies, manual direction, and procedures that apply. See numerous citations to peer-reviewed research publications throughout the EIS.
	PCS 381: The Forest Service should only include an impact assessment if the impact that they are identifying is measurable. With respect to impact assessment, if you cannot measure an impact then it is not a real impact. No examples of non-measured impacts are given. (22.25)
Miscellaneous	Response: The IDT analyzed the effects of each alternative utilizing the best available scientific information and by following laws, policies, and procedures that are in place. Potential impacts described in chapter 3 were described in terms of type (direct, indirect, cumulative and are the effects beneficial or adverse?); context (are the effects site specific, local, or even regional?); duration (are the effects short term or long term?); and intensity. The Forest Service made every effort to measure potential site-specific impacts, but some impacts are difficult to quantify in all cases. Where necessary, impacts are described qualitatively and in the context of trends in order to provide an adequate comparison between the alternatives.
	PCS 382: The Forest Service should reanalyze the information as there are many flaws in the data, lack of data, and method of determination of use and nonuse in this plan. (203.1, 245.1, 255.1)
Miscellaneous	<b>Response:</b> The Helena National Forest has considered your comments and has prepared a range of alternatives to consider for motorized and non-motorized uses. The IDT analyzed the effects of each alternative utilizing the best available scientific information and by following laws, policies, and procedures that are in place. Three action alternatives have been provided that look at a reasonable range of both motorized and non-motorized uses while balancing these recreational demands with environmental/biological concerns.
Miscellaneous	PCS 383: The Forest Service should continue with the Blackfoot Travel Plan as it allows for aquatic restoration, improvement for fish and wildlife habitat, and promotes connectivity throughout the Helena National Forest. All of these will positively contribute to the goals and success of the Southwestern Crown Collaborative. (84.1)
	Response: Thank you for your support.

Subject	Public Comment Statements (PCS) and Forest Service Responses
Miscellaneous	PCS 384: The Forest Service should maintain the national priority of the Blackfoot Travel Plan as part of the Collaborative Forest Landscape Restoration Program. (84.2)
	Response: Thank you for your support.
Miscellaneous	PCS 385: The Forest Service should know that the US Fish and Wildlife Service will be addressing their concerns regarding the fish and wildlife resources on the Helena National Forest through the Endangered Species Act consultation process. (69.1)  Response: Understood; we look forward to continued Endangered Species Act Section 7 consultation with the U.S. Fish and Wildlife Service on this project.
	Letter #22, 45, 114, 161, 167, 211, and 227 all cited literature or provided websites or other references in support of
Literature and other references cited by those who commented on the DEIS	individual comments contained in each of these letters. These references were listed in spreadsheet format, with the letter and individual comment number, the subject of the issue and the citation or website included. There were 202 of these references or citations and all were reviewed and considered by the interdisciplinary team during the development of alternative 4, revisions to the DEIS and preparation of the FEIS. Those references that were relevant to the analysis are included in individual specialist reports, cited in those reports, and included in full in the project record. How all these cited literature and references were considered and used is included in the project record.

## Updated Response to Comments Table

Table J- 3. Updated public comment content analysis on 43 letters that were not included in the March – June 2013 content analysis database

Letter number and date	Subject	Comment/Concern	Existing Public Comment Statement (PCS) <sup>1</sup>	Response
285 3/11/13 Ehnes (GFBRA)	Purpose and Need		PCS 03, 043, 039	These comments are reflected in existing public comment statement(s); PCS were used in the preparation of the March 2014 FEIS and draft RODs, as described in more detail in FEIS appendix J and in portions of FEIS chapters 1 and 2.
	Sustainability	We believe a balance between natural resource protection and public access can be achieved if the Supervisor takes a more aggressive approach to managing closed roads by using road storage and obliteration to protect aquatic and terrestrial resources while having a liberal approach on allowing OHV travel on sustainable routes. This combination will result in a balance of providing resource protection and high quality OHV opportunities for the public. This will also provide substantial economic benefit for the community of Lincoln.		The range of alternatives presented in the FEIS were built upon providing a balance between resource protection and providing recreational opportunities. The alternatives analyzed do include varying levels of road storage and decommissioning while still providing access.
	Bicycles have similar effects as ATVs		PCS 149	These comments are reflected in existing public comment statement(s); PCS were used in the preparation of the March 2014 FEIS and draft RODs, as described in more detail in FEIS appendix J and in portions of FEIS chapters 1 and 2.
	Bicycles have similar effects as ATVs	This is demonstrated in the following document:  Behavioral Responses of North American Elk to Recreational Activity  LESLIE M. NAYLOR, 1,2 Department of Fisheries and Wildlife, Oregon State		The findings of this study are addressed in the elk effects analysis of the wildlife report, FEIS and the Big Game

Letter number and date	Subject	Comment/Concern	Existing Public Comment Statement (PCS) <sup>1</sup>	Response
		University, Corvallis, OR 97331,USA  MICHAEL J. WISDOM, United States Department of Agriculture Forest Service, Pacific Northwest Research Station, 1401 Gekeler Lane, La Grande,OR 97850, USA  ROBERT G. ANTHONY, United States Geological Survey Oregon Cooperative Fish and Wildlife Research Unit, 104 Nash Hall, Oregon State University, Corvallis, OR 97331, USA		Amendment.
	Bicycle effects on wildlife should be considered		PCS 149	These comments are reflected in existing public comment statement(s); PCS were used in the preparation of the March 2014 FEIS and draft RODs, as described in more detail in FEIS appendix J and in portions of FEIS chapters 1 and 2.
	Bike/OHV trail sharing		PCS 0115	These comments are reflected in existing public comment statement(s); PCS were used in the preparation of the March 2014 FEIS and draft RODs, as described in more detail in FEIS appendix J and in portions of FEIS chapters 1 and 2.
	Seasonal closure dates		PCS 158, PCS 157	These comments are reflected in existing public comment statement(s); PCS were used in the preparation of the March 2014 FEIS and draft RODs, as described in more detail in FEIS appendix J and in portions of FEIS chapters 1 and 2.
	Bow hunter		PCS 159	These comments are reflected

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	closure dates			in existing public comment statement(s); PCS were used in the preparation of the March 2014 FEIS and draft RODs, as described in more detail in FEIS appendix J and in portions of FEIS chapters 1 and 2.
	Fair balance between motorized and non-motorized trails in the alternatives		PCS 042	These comments are reflected in existing public comment statement(s); PCS were used in the preparation of the March 2014 FEIS and draft RODs, as described in more detail in FEIS appendix J and in portions of FEIS chapters 1 and 2.
	Alternatives	1. Summary of the EIS: page S-1 Objectives: "Provide for parking safely next to the side of the road."  And on page 25, features common to the Action Alternatives: MTVRA asks that 'trail' be added. The need for safe and legal parking of a motorized vehicle next to or near a trail has existed for some time. While it would seem reasonable that a person could park their motorcycle/A TV next to the trail rather than on the trail, there have been incidents of enforcement people writing tickets for parking a vehicle off the trail. An OHV rider from the Great Falls area received a ticket after he parked his ATV off the trail and had gone grouse hunting on foot. When he returned the enforcement person was there and issued a ticket, saying that the ATV was not to be off the trail and parking was not authorized. This specific incident happened in the Little Belt Mountains, near Deep Creek Park.		This suggestion is reflected in the FEIS
	ID a preferred alternative	Identification of a preferred action alternative:  A preferred action alternative sets the stage for significant and meaningful public involvement. The identification of a preferred action alternative creates a starting point, with one complete set of ideas to read and digest. If an area or item is in question, a person then has the option of reviewing and		The preferred alternative is identified in the FEIS; it is not required in a DEIS. The objection period provides opportunity for public review of

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		researching other alternatives, commenting on the site specific issue. The absence of a preferred action alternative discourages public participation and comments. The DEIS is in an excess of 500 pages, with several small maps and 3 large maps and is an intimidating document. With the time constraints of everyday life, this process has left the public with the near impossible task of trying to read and understand the document. The absence of a preferred action alternative creates an atmosphere where the public halno idea what the agency might be contemplating. It puts the burden on the participants in the process to try to imagine the many trail by trail combinations from the alternatives the decision maker could make in the FE IS. Once these decisions are made and the FE IS is released the ROD has generally been issued right behind it, if not released at the same time. This makes any chance on commenting on the unknown changes impossible and the only avenue for change open is the appeal process.		FEIS and draft ROD prior to final decision
	Do Supplemental DEIS if new information		PCS 373, PCS 333	These comments are reflected in existing public comment statement(s); PCS were used in the preparation of the March 2014 FEIS and draft RODs, as described in more detail in FEIS appendix J and in portions of FEIS chapters 1 and 2.
				The current objection process is being used and is designed to allow for this review and engagement prior to a final decision
	Plan needs to be easy to understand/ma ps are confusing		PCS 112, 368, 369	These comments are reflected in existing public comment statement(s); PCS were used in the preparation of the March 2014 FEIS and draft RODs, as described in more detail in FEIS appendix J and in

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				portions of FEIS chapters 1 and 2.
	Public perception		PCS 04	These comments are reflected in existing public comment statement(s); PCS were used in the preparation of the March 2014 FEIS and draft RODs, as described in more detail in FEIS appendix J and in portions of FEIS chapters 1 and 2.
	Quality Non- motorized system		PCS 042	These comments are reflected in existing public comment statement(s); PCS were used in the preparation of the March 2014 FEIS and draft RODs, as described in more detail in FEIS appendix J and in portions of FEIS chapters 1 and 2.
	Wilderness	Throughout the DEIS the documents on soils, wildlife, etc address the area as a whole, with Wilderness information included. Only in the trail inventory sections is the Wilderness excluded.		The area of impact analysis can differ for each resource depending on the particular potential for direct/indirect and cumulative effects for that particular resource. The FEIS is clear though that no actions are proposed within designated Wilderness
	Cumulative effects of motorized route closures on motorized community	Cumulative Effects: Chapter 3, page 48, 49 Cumulative effects are understated. We would reference the DE IS North Belts Travel Plan, 2003, Chapter 4, page 267 Cumulative Effects, Recreation. This chapter shows an accurate picture of the effects of past closures and restrictions; closed on the Helena National Forest since 1986; 265,710 acres and 246 miles or roads and trails. We would like to add to the list of lost opportunities for motorized recreation: designation of the Scapegoat Wilderness Area 240,500 acres,	PCS 333	These comments are reflected in existing public comment statement(s); PCS were used in the preparation of the March 2014 FEIS and draft RODs, as described in more detail in FEIS appendix J and in

Letter number and date	Subject	Comment/Concern	Existing Public Comment Statement (PCS) <sup>1</sup>	Response
		area closure & trails from Rogers Pass to Fletcher 13,000 acres, and the area closure of 70% of the Highwood Mountains 42,460 acres in 1993, the Little Belts 2007, Lewis & Clark NF, 300 miles of trails, the 3 State EIS closed 625,447. All of these areas were used by motorized vehicles from the 1950's until time of closures and although we do not have a total of trail miles lost, it is more than significant.		portions of FEIS chapters 1 and 2.  Most of the areas referenced are outside of the planning area for the BNWTP, as such they would be considered outside the scope of this project for consideration as cumulative effects. In addition as stated in the FEIS Appendix D Cumulative Effects: "The baseline used for cumulative effects analysis is the current condition. The cumulative effects analysis, while including some consideration of past human actions, does not fully quantify all effects of past human actions by calculating all prior actions on an action-by-action basis. By looking at current conditions, we are sure to capture residual effects of past human actions and natural events, regardless of which particular action or event contributed those effects. The Council on Environmental Quality issued an interpretive memorandum on June 24, 2005, regarding analysis of past actions, which states, "agencies can conduct an adequate cumulative effects analysis by focusing on the current aggregate effects of

Letter number and date	Subject	Comment/Concern	Existing Public Comment Statement (PCS) <sup>1</sup>	Response
				past actions without delving into the historical details of individual past actions." The cumulative effects analysis in this EIS is also consistent with Forest Service NEPA Regulations (36 CFR 220.4(f)). For these reasons, while some past actions are listed and considered, the focus of the cumulative analysis is based on current environmental conditions."
	Cumulative effects	Past actions, page 48: "On balance, some past actions increased the amount of motorized use in the Blackfoot Travel Planning area, and others decreased it." From the ground, as motorized recreationist, we disagree with this statement. The increase in motorized use in the area came about due to the change in mode of travel; the advent of ATVs and snowmobiles. The maps showing the single track trails that were open to motorcycles would not support the statement.  Past agency actions decreased the opportunity for legal routes.	PCS 333	These comments are reflected in existing public comment statement(s); PCS were used in the preparation of the March 2014 FEIS and draft RODs, as described in more detail in FEIS appendix J and in portions of FEIS chapters 1 and 2.
	MVUM production	We would encourage the review of the Little Belts User maps (2010) that were created and made available to all users after the 2007 Travel Plan was successfully appealed. These maps show all trails and the type of use for each trail along with a chart showing dates. Over 20,000 maps were distributed with great comments from all users and the agency. The maps educate everyone to the users they may encounter and do not create false expectations. Compliance with the map has been excellent and the closures and date restrictions are being obeyed. See MTVRA Comment Attachment 2. Lewis & Clark National Forest, Little Belt Mountains, motorized map. The maps were printed with a Montana State Parks OHV grant to the Great Falls Trail Bike Riders Association. This was accomplished by a partnership with the Lewis & Clark National Forest and the Great Falls Trail Bike Riders Association. GFTBRA is now working with the Supervisors Office in Great Falls to compile the current information and produce a map showing the		The Little Belts user maps are indeed a useful tool. This partnership process will be given heavy consideration once the travel plan process is completed.

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		2013 trails. The Friends of Pipestone has received a 2013 OHV grant to print similar maps showing the trails in the Whitetail Pipestone area this year. The partnership process is a resource to be considered once the travel plan is completed.		
	Site-specific comments	<ul> <li>1st, 2nd, and 3rd gulch coonection with Alice Creek</li> <li>1st, 2nd and 3rd connection with Cadotte Creek and use of existing powerline in this area</li> <li>Mike Horse area connection to Meadow Creek Rd And open year round</li> <li>Sandbar to Fletcher pass connector open year long</li> <li>Hogum Creek connectors as in Alt 2 and 3</li> <li>Stonewall trail 418 maintain motorized or if closed, ensure 1821 remains open yearlong.</li> <li>Trail 467 Helmville Gould keep motorized</li> <li>404 and 401 to Dalton keep motorized</li> <li>Add U417 to the plan as motorized</li> <li>Keep 440 CDNST open to motorized use</li> <li>Keep 440 open to motorized use through RNA</li> <li>Lincoln Gulch connector</li> <li>T13N, R7W motorized routes</li> <li>T13N, R8W Rochester Gulch loop</li> </ul>	PCS 143, PCS 225, PCS 225, PCS 44, PCS 225, PCS 329, PCS 109, PCS 014, PCS 026, PCS 038. PCS 110, PCS 157, PCS 364, 072, PCS 94	These comments are reflected in existing public comment statement(s); PCS were used in the preparation of the March 2014 FEIS and draft RODs, as described in more detail in FEIS appendix J and in portions of FEIS chapters 1 and 2.
	R1 Management Area	Trail 467 is an important trail with many determinations over the past years supporting motorized use for these trails. The special orders (attached) signed in 1990 and 1991 by Forest Supervisor Ernest Nunn addressing the Nevada Mountain area and trail 467 are mentioned and addressed in correspondence by Tyson O'Connell to you but the maps were not addressed. The current USFS maps for the area, from the 1986 Forest Plan shows the trail located inside the R-1 designated area (semi primitive non motorized). The map referred to and attached as Exhibit A to the Special Restrictions order for Nevada Mountain shows the trail clearly located outside of the R-1 area. The order was signed on November 26, 1990 by Ernest R. Nunn, Forest Supervisor, Helena National Forest. A Decision Memo was signed October 9, 1990 closing 12,000 acre		These comments regarding the history behind trail 440 and trail 467 and their relationship to Forest Plan Management Area R1 is discussed in detail in FEIS appendix I and summarized in FEIS chapter 2.

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		Nevada Mountain Roadless Area to motorized vehicles. This memo specifically states that Trail #467 and Trail #440 are outside the area and are not affected by the decision. Again the map, Exhibit A is referenced. A Special Restrictions Order dated June 1991 again stated the "Gould-Helmville trail #467 is open yearlong to motorized vehicles. We believe the map marked Exhibit A contradicts the current statement on page 129 that these trails are inside the R-1 area. We believe the orders along with the maps issued in 1990 and 1991 should have prompted a correction or amendment to the 1986 Forest Plan in the 1990s. (See MTVRA Comments, Attachments 3; A, B, C, D, & E, MTVRA)		
	Trail 487	Keep 487 open to motorcycles		Trail 487 was proposed to remain open to motorcycle use in Alternative 2.
	Seasonal restrictions	We oppose seasonal restrictions aimed only at simplification and have no basis in resource protection		All changes in seasonal restrictions proposed as part of the alternatives analyzed in the FEIS were based on joint objectives for resource protection and visitor experience
	Cumulative effects	The Cumulative Effects of Alternative 3, page 327, did not consider this loss of opportunity to the OHV community. Recreation, page 329 says "An unknown number of both 4 wheel and 2 wheel motorized recreationists would probably be displaced to other parts of the Forest, neighboring Forests, or other public land." With every proposal making this same statement, just when does the displacement and loss of opportunity become addressed?	PCS 333	Alternative 3 has the most substantial changes proposed to both the motorized and non-motorized system of trails. The proposed changes would be expected to produce the greatest amount of user displacement. Alternative 4, the preferred alternative, was developed in part to address this displacement and loss of opportunity.
	Trail designation	Trail use designated by trail width not by class		Trail Class determines construction and maintenance standards. Trail width is

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				addressed through this process as is clearing intervals, turn radius, and target grade of the trail. Trail use is determined separate from trail class in order to better capture the complexity of a diverse trail system. Designed and allowed uses are certainly related to trail class, but do not act alone in determining a trail class.
		Trail 440, Flesher Pass to Rogers Pass: On the Forest Service Travel map dated 1977, Trail 440 from Flesher Pass to Rogers Pass was identified as a designated motorized route. This section of the CDNST was used for many years beginning in the early 1960's. Since the opportunity for a loop was not available, often a driver would drop the riders at Rogers and then meet them at the 7-Up Ranch. Other types of trips also took place using this section of trail.		The national direction for the CDNST is to provide a non-motorized trail experience. Your dissatisfaction with the manner in which the trail was closed to motorized use in the past is noted.
	Trail 440	The trail was closed without notice and when we inquired as to the reason, we were told the FWP had closed the trail. When asked, FWP said they knew nothing about it. In the 2000 letter/notice requesting our comments on the Helena National Forest Travel Planning, reference was made to this section of trail saying it "is presently designated as a 'circle 5' restricted area under the Forest Travel Plan." We are unable to determine what that means. While we realize this trail was never examined or included in this travel planning cycle, we would like the record to reflect our dissatisfaction with the process surrounding the closure of this trail.		

Letter number and date	Subject	Comment/Concern	Existing Public Comment Statement (PCS) <sup>1</sup>	Response
286 3/11/13 Ehnes (MTVRA)	Same as letter 285	This letter 286 is identical to letter 285 but with slightly different attachments  – attachments listed below  • Attachment 1 magazine article - ATVs: If you ride, be safe and responsible  • Attachment 2 – Lewis and Clark Little Belts 2012 Travel Map photocopy  • Attachment 3 – copy of 1989 FS Closure Order for Nevada Mountain Area and the 1990 rescinding of the order, with decision memo  • 1991 FS Special restrictions for Trail 467 –Helmville Gould		These attachments were made available to the interdisciplinary team
FORM 1 3/12/13 Postcard (name unreadab le)	Adopt Alternative 3; no off-route use		PCS 032 and 033	These comments are reflected in existing public comment statement(s); PCS were used in the preparation of the March 2014 FEIS and draft RODs, as described in more detail in FEIS appendix J and in portions of FEIS chapters 1 and 2.
FORM 1 3/12/13 Hankins Outside Commen t Period for travel plan	Adopt Alternative 3; no off-route use; keep CDNST non- motorized		PCS 032 and 122	These comments are reflected in existing public comment statement(s); PCS were used in the preparation of the March 2014 FEIS and draft RODs, as described in more detail in FEIS appendix J and in portions of FEIS chapters 1 and 2.
FORM 1 3/13/13 DiMarco	Adopt Alternative 3; no off-route use; keep		PCS 32 and 33	These comments are reflected in existing public comment statement(s); PCS were used in the preparation of the March

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Outside Commen t Period for travel plan	CDNST non- motorized			2014 FEIS and draft RODs, as described in more detail in FEIS appendix J and in portions of FEIS chapters 1 and 2.
FORM 1 3/16/13 Ellis Outside Commen t Period for travel plan	Adopt alternative 3 Form Letter 1 (letter 61)		PCS 32 and 33	These comments are reflected in existing public comment statement(s); PCS were used in the preparation of the March 2014 FEIS and draft RODs, as described in more detail in FEIS appendix J and in portions of FEIS chapters 1 and 2.
FORM 1 3/16/13 Draper Outside Commen t Period for travel plan	Adopt Alternative 3; no off-route use; keep CDNST non- motorized; keep current elk standars		PCS 32 and 33 and 122	These comments are reflected in existing public comment statement(s); PCS were used in the preparation of the March 2014 FEIS and draft RODs, as described in more detail in FEIS appendix J and in portions of FEIS chapters 1 and 2.
3/21/13 Crist TWS Outside Commen t Period for travel plan	Same attachment (with an earlier date) was submitted & logged in	Attachment A - Landscape Analysis and Decommissioning Prioritization of the Lincoln Ranger District's Road Network by Michele Crist, Senior Landscape Ecologist, Center for Landscape Analysis - The Wilderness Society - March 15, 2013  This document provides a detailed landscape fragmentation analysis of DEIS alternative 3 (road density and patchiness) and offers suggestions for prioritizing roads for decommissioning  Key points (the full text of this paper is not included here):		The FEIS, chapter 2, Table 7 provides a summary of effect of each alternatives and discusses the differences of road decommissioning, road storage, road closures and new road and trail construction and re-construction, effects of roads on wildlife, streams and watersheds.

Subject	Comment/Concern	Existing Public Comment Statement (PCS) <sup>1</sup>	Response
	<ul> <li>It documents the 7 primary ecological effects of roads (sediment, fish and aquatic habitat, patchiness, wildlife habitat, elk, grizzly bear, inventoried roadless areas)</li> </ul>		Chapter 3 discusses the full effects of the summary provided in chapter 2.
	Road density was calculated using moving windows analysis		
	It provides a list of priority roads for decommissioning, road storage and motorized trails		
	<ul> <li>It also provides a section of overall effects of roads on wildlife, streams/watersheds</li> </ul>		
	It provides the data and conclusions from the analysis in tabular form attached to the paper		
	As stated in the letter, roads and motorized trails should be closed and reclaimed based on the following guidelines:		
	<ul> <li>Calculate a comprehensive set of fragmentation metrics for each species of interest based on how close to a road feature the species will use habitat (distance to road) and how large an area of contiguous habitat is required for different life functions (core area size). These measurements can indicate the amount of remaining habitat in the forest and help identify priority areas to protect and restore. When interpreting these measurements, take into account the high levels of natural landscape heterogeneity and natural barriers to movement within the steep topography of the LRD.</li> </ul>		
	<ul> <li>Set a target to decommission a large percent of the roads in the LRD that would substantially reduce road density across the district, focusing on four-wheel-drive roads (largely class 1 and 2 roads) and unclassified logging roads. These roads make up a large portion of the LRD road network and are not</li> </ul>		
	use as much as other roads in the forest.      Eccus roctoration in areas of moderate road density, rather than the		
		fish and aquatic habitat, patchiness, wildlife habitat, elk, grizzly bear, inventoried roadless areas)  Road density was calculated using moving windows analysis  It provides a list of priority roads for decommissioning, road storage and motorized trails  It also provides a section of overall effects of roads on wildlife, streams/watersheds  It provides the data and conclusions from the analysis in tabular form attached to the paper  As stated in the letter, roads and motorized trails should be closed and reclaimed based on the following guidelines:  Calculate a comprehensive set of fragmentation metrics for each species of interest based on how close to a road feature the species will use habitat (distance to road) and how large an area of contiguous habitat is required for different life functions (core area size). These measurements can indicate the amount of remaining habitat in the forest and help identify priority areas to protect and restore. When interpreting these measurements, take into account the high levels of natural landscape heterogeneity and natural barriers to movement within the steep topography of the LRD.  Set a target to decommission a large percent of the roads in the LRD that would substantially reduce road density across the district, focusing on four-wheel-drive roads (largely class 1 and 2 roads) and unclassified logging roads. These roads make up a large portion of the LRD road network and are not	It documents the 7 primary ecological effects of roads (sediment, fish and aquatic habitat, patchiness, wildlife habitat, elk, grizzly bear, inventoried roadless areas)  Road density was calculated using moving windows analysis  It provides a list of priority roads for decommissioning, road storage and motorized trails  It also provides a section of overall effects of roads on wildlife, streams/watersheds  It provides the data and conclusions from the analysis in tabular form attached to the paper  As stated in the letter, roads and motorized trails should be closed and reclaimed based on the following guidelines:  Calculate a comprehensive set of fragmentation metrics for each species of interest based on how close to a road feature the species will use habitat (distance to road) and how large an area of contiguous habitat is required for different life functions (core area size). These measurements can indicate the amount of remaining habitat in the forest and help identify priority areas to protect and restore. When interpreting these measurements, take into account the high levels of natural landscape heterogeneity and natural barriers to movement within the steep topography of the LRD.  Set a target to decommission a large percent of the roads in the LRD that would substantially reduce road density across the district, focusing on four-wheel-drive roads (largely class 1 and 2 roads) and unclassified logging roads. These roads make up a large portion of the LRD road network and are not  use as much as other roads in the forest.

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		highest-density areas. These less degraded areas have a greater potential for creating larger patches of relatively unroaded land. This scenario would increase landscape connectivity across the LRD, aiding the movements of many species, connecting areas that are relatively road-free, and creating larger, contiguous areas with a lower density of roads. Overall, the aim should be to create large areas with road densities lower than those that are known to adversely affect all species of concern, including those listed as threatened and endangered.		
		<ul> <li>When wildlife data are insufficient, management decisions should be made conservatively, and monitoring should be implemented until the effects of motorized travel on species are better understood.</li> </ul>		
		<ul> <li>Focus restoration on watersheds that lie between unroaded or low-road-density watersheds to connect watersheds across regions important for aquatic species movements and migrations. It is critical to protect remaining unroaded or nearly unroaded watersheds in the LRD. Because of the increasing rarity of unroaded areas, especially unroaded watersheds, management efforts cannot rely solely on protection of existing natural areas to maintain functioning aquatic ecosystems.</li> </ul>		
		<ul> <li>Protect and improve relatively unroaded areas and IRAs from further road development. Roadless areas in the LRD are relatively undisturbed and function as high-quality mid- to lower-elevation habitat for many wildlife species that is not currently provided to a significant extent by any designated</li> </ul>		
		<ul> <li>Wilderness in the region. Identify and close/decommission roads in a way that increases patch sizes, which would increase habitat quality for many species negatively affected by "edge effects" from roads (Temple 1986).</li> </ul>		
		<ul> <li>Maintain non-motorized patches of sufficient size to allow major life functions (breeding, migration, seasonal habitat) for large carnivores and ungulates in the LRD.</li> </ul>		
		<ul> <li>Focus road restoration and decommissioning on the priority roads highlighted in this study.</li> </ul>		
		<ul> <li>Focusing restoration, including closing/ decommissioning roads, in</li> </ul>		

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		these roads will improve habitat conditions for many aquatic and terrestrial species, as well as improve landscape connectivity for species movements across the entire forest.		
288 FORM 5 4/2/13 Gilchrist	Big Game Security Amendment	Elk Cover Requirements. Elk do well in places like Nevada without trees. Additionally, elk were originally a plains animal and survived just fine without trees. Effective elk hiding is provided by mountains, hills, ravines, ridges, rocks, brush. These land factors must be incorporated into the elk hiding cover equation. Recent analysis by the Helena National Forest for the Elkhorn Wildlife Management Area has demonstrated that a reasonable consideration of the topography in the area would meet the requirements for elk security. This reasonable and realistic approach to elk cover and wildlife security requirements must be part of the Blackfoot Travel Planning analysis.		Appendix F includes recognition that security may be provided by features such as topography; Appendix F provides the rationale and methodology behind the security definition utilized in Big Game Amendment Alternative B.
		Additionally, wolves have radically changed elk behavior and use of tree canopy. Elk now avoid tree cover because the cover allows wolves to prey upon them easier. Elk now prefer open areas where they can "keep an eye" on the wolves and defend themselves. Therefore, tree cover is not a significant benefit to elk at this time and this changed condition must be recognized.		Appendix F includes recognition that predation affects elk numbers and distribution; Security as defined in Big Game Amendment Alternative B does not include a cover requirement.
	Impacts from motorized use are less than natural levels of disturbance		PCS 117, 332	These comments are reflected in existing public comment statement(s); PCS were used in the preparation of the March 2014 FEIS and draft RODs, as described in more detail in FEIS appendix J and in portions of FEIS chapters 1 and 2.
	If you cannot measure an impact then it is not a real impact.		PCS 381	These comments are reflected in existing public comment statement(s); PCS were used in the preparation of the March 2014 FEIS and draft RODs, as described in more detail in

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				FEIS appendix J and in portions of FEIS chapters 1 and 2.
	Seasonal closures are a reasonable alternative to keeping routes open during summer	Use of seasonal closures is a reasonable alternative in most situations. When required, seasonal closures can be used to protect the environment and wildlife with the intention of keeping routes open for the summer recreation season.	PCS 160	These comments are reflected in existing public comment statement(s); PCS were used in the preparation of the March 2014 FEIS and draft RODs, as described in more detail in FEIS appendix J and in portions of FEIS chapters 1 and 2.
	Site-specific data should be used to justify changes in use		PCS 194, 226,	These comments are reflected in existing public comment statement(s); PCS were used in the preparation of the March 2014 FEIS and draft RODs, as described in more detail in FEIS appendix J and in portions of FEIS chapters 1 and 2.
	There is no evidence of the CDNST as a wildlife corridor; please justify		PCS 135	These comments are reflected in existing public comment statement(s); PCS were used in the preparation of the March 2014 FEIS and draft RODs, as described in more detail in FEIS appendix J and in portions of FEIS chapters 1 and 2.
		OHV use does not kill wildlife. Wildlife coexists just fine with OHVs. This was	PCS 230	These comments are reflected

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		recently confirmed again by a study in Yellowstone Park which found that "Most elk, bison and trumpeter swans barely reacted last winter to the presence of snowcoaches and snowmobiles in Yellowstone National Park, according to a study released Tuesday. Scientists watched more than 2,100 interactions between over-snow vehicles and wildlife last year to try to determine how they responded. Of those, 81 percent of the animals had no apparent response or they looked and then resumed what they were doing, the study said" (http://www.helenair.com/articles/2005/12/14/montana/a10121405_04.prt and http://www.nps.gov/yell/parkmgmt/upload/winterrec05.pdf).		in existing public comment statement(s); PCS were used in the preparation of the March 2014 FEIS and draft RODs, as described in more detail in FEIS appendix J and in portions of FEIS chapters 1 and 2.  Research findings on the effects of various recreational uses including OHVs are addressed in detail in the elk effects analysis of the wildlife report, FEIS and the Big Game Amendment. Available research indicates that responses to various recreational uses vary by
		A study of the heart rate of elk found that humans walking between 20 to 300 meters from the elk caused them to flee immediately 41% of the time while an OHV passing within 15 to 400 meters of the elk caused them to flee 8% of the time (Ward, A. L. and J. J. Cupal. 1976. Telemetered heart rate of three elk as affected by activity and human disturbance. USDA Forest Service, Rocky Mountain Forest and Range Experiment Station. Laramie, WY. 9 pp.). Therefore, hikers disturb elk more than motor vehicles and "disturbance of wildlife" should not be used as a reason to justify motorized recreation and access closures. Additionally, when there are concerns with wildlife disturbance, restrictions on hikers should be given a greater emphasis than restrictions on motorized visitors.	PCS 230	species and seasonally.  These comments are reflected in existing public comment statement(s); PCS were used in the preparation of the March 2014 FEIS and draft RODs, as described in more detail in FEIS appendix J and in portions of FEIS chapters 1 and 2.  Might want to add more here
		A study of mule deer found that 80% fled in reaction to encounters with persons afoot while only 24% fled due to encounters with snowmobiles (David J. Freddy, Whitcomb M. Bronaugh, Martin C. Fowler, "Responses of Mule Deer to Persons Afoot and Snowmobiles", Wildlife Society Bulletin, 1986). Therefore, hikers disturb deer more than motor vehicles and	PCS 230	The analysis incorporated more recent science on the effects of non-winter recreational activities on wildlife. As noted in the

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		"disturbance of wildlife" should not be used as a reason to justify motorized recreation and access closures. Additionally, when there are concerns with wildlife disturbance, restrictions on hikers should be given a greater emphasis than restrictions on motorized visitors.		referenced 1986 study deer initially responded to snowmobiles at greater distances allowing deer to better anticipate approaching snowmobiles which stayed on trails and passed more quickly whereas people did not remain on trails and passed more slowly. The study noted that if human activities were further restricted to trails, deer might perceive the activities as predictable and more acceptable. While the study did report greater response to people afoot if also acknowledged that flight response could be affected by various factors including species, intensity of sporthunting, potential for habituation, type of vegetation and season.
<b>FORM 5</b> 4/4/13 CTVA	Big Game Security Amendment	Same as letter 288-FORM 5		
<b>FORM 5</b> 4/4/13 Sedlock	Big Game Security Amendment	Same as letter 288-FORM 5		
FORM 5 4/4/13 Thares	Big Game Security Amendment	Same as letter 288-FORM 5		
FORM 5 4/4/13	Big Game Security	Same as letter 288-FORM 5		

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Smith	Amendment			
FORM 5 PLUS 4/4/13 Nelson	Big Game Security Amendment	Same as letter 288-FORM 5 but with this one additional comment added: The national forests belong to all the people not just a select few. Us older people have to use 4-wheelers to get into the woods and are not likely to disturb it and are always trying to preserve it for future generations. The trails in the woods are used by responsible citizens that want continued use of lands and will help to protect it.	Unique comment is PCS 120	These comments are reflected in existing public comment statement(s); PCS were used in the preparation of the March 2014 FEIS and draft RODs, as described in more detail in FEIS appendix J and in portions of FEIS chapters 1 and 2.
FORM 5 4/4/13 Kronsper ger	Big Game Security Amendment	Same as letter 288-FORM 5		
FORM 5 4/4/13 Kunz	Big Game Security Amendment	Same as letter 288-FORM 5		
FORM 5 4/6/13 Sedlock	Big Game Security Amendment	Same as letter 288-FORM 5		
FORM 5 4/8/13 Forkan	Big Game Security Amendment	Same as letter 288-FORM 5		
<b>FORM 5</b> 4/8/13 Barsil	Big Game Security Amendment	Same as letter 288-FORM 5		
FORM 1 4/9/13 Paulson Outside Commen t Period for travel	Alternative 3 with no off- route motorized use, with elk habitat protection and CDNST protection		PCS 33, 326, 282, 73, 75, 95, 29, 33, 114, 130	These comments are reflected in existing public comment statement(s); PCS were used in the preparation of the March 2014 FEIS and draft RODs, as described in more detail in FEIS appendix J and in portions of FEIS chapters 1

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plan				and 2.
290 4/22/13 CTVA Outside Travel Plan Commen t Period		This letter was submitted as commenting on the big game security amendment but provides many comments related to travel plan – the entire body of the letter is exactly the same as letter #022 that CTVA previously submitted that was coded and analyzed.  The attachment to the letter is similar to letter #288-FORM 5 and uses the same text but does provide some unique content related to wildlife as follows:		
	Travel Plan and Big Game Security Amendment	The impact of OHV recreation on wildlife has been overstated. First, wildlife populations are at all time high (http://www.mtstandard.com/articles/2005/11130/outdoorslhjjeiigjjcefib.txt,htt p://fwp.mt.gov/FwpPaperApps/hunting/ElkPlanFinal.pdf) at the same time when OHV use is increasing. If there is any impact to be identified, it appears that it should be that the positive impact associated with increasing OHV use and increasing wildlife populations.	The link no longer works	In the project area, ungulate populations peaked in the early 2000's and have since declined. The effects of various recreational uses upon wildlife, including OHVs, were analyzed in the Wildlife Report, FEIS, and Big Game Amendment incorporating findings from recent research.
		Some interests are pushing the wildlife corridor concept and trying to associate it with the CDNST or wildlife corridors as a reason to close areas to motorized use. We have not seen adequate documentation or reasoning to justify this position and suspect that it is being used inappropriately as a reason to justify defacto wilderness by non-motorized interests. Significant issues must be answered before this concept can be given any credibility. Issues include:  a. Why would wildlife follow physically challenging basin divides where food and water is scarce versus other corridors? They don't. This is easily verified by open areas such as McDonald Pass or the jagged areas of the continental divide where we have never observed any significant number of wildlife crossings		The different conceptual interpretations of wildlife corridors are beyond the scope of this project. The potential of the proposed project to impact habitat connectivity for various species is addressed in the species analysis of the wildlife report, FEIS, and the big Game Amendment.

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		versus great numbers of wildlife crossings that we have observed in other areas that are more favored by wildlife. b. Where is the documentation that the continental divide or other basin divides are favored for wildlife migration? Especially theories that purport that wildlife will migrate from Mexico to Canada. This is counter-intuitive to the types of habitat that different species require in order to survive. There is a significant lack of credible evidence to support these claims. c. The lack of authorization or mandate from congress. d. The socio-economic issues associated with the attempt to use the wildlife corridor concept to convert multiple-use lands to defacto wilderness.		
		Additionally, specific NVUM data for the forests in our area, specifically the BeaverheadDeerlodge, Caribou-Targhee, Gallatin, and Helena National Forests shows that there were 6,191,000 total site visits to the forests and only 85,000 wilderness visits (http://www.fs.fed.us/recreation/programs/nvum/revised vis est.pdf). Therefore, wilderness visits in our region is only 1.37% of the total visits yet every decision by the Forest Service has produced both a disproportionately large and an increased number of recreation opportunities for wilderness visitors and at the expense of the multiple-use and motorized visitors. The public comments and votes by how they use the forest, and more motorized access and recreation is what they are asking for with every visit.  In addition to the studies cited above, we have observed that 97% of the visitors to multipleuse areas are enjoying multiple-use activities based on motorized access and motorized recreation as shown in Table 1.  Out of the 23,171 recreationists that were observed, 243 were hikers and all of the meetings were pleasant. We have not experienced any user conflict in 14 years of observations.  Therefore, over 97% of the public land should be managed for multiple-uses including motorized access and mechanized recreation. However, over 50% of the public land is managed by wilderness, wilderness study area, national park, monument, roadless, nonmotorized area, wildlife management, and other restrictive management criteria that eliminates most or all motorized		The scope of this travel plan is limited to the Blackfoot Travel Plan area. Considerations of use outside of this area are not a part of this effort.  This plan does not seek to designate any further acreage to Wilderness or Roadless areas.  Under Alternative 4, the preferred alternative, the number of trails open to motorized use would result in a net increase of 13 miles.

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		access and motorized recreation. The Final Roadless Rule published on January 5, 2001 (http://roadless.fs.fed. us/ documents/rule/roadless fedreg rule.pdf) specifically stated "The proposed rule did not close any roads or off-highway vehicle (OHV) trails". The agency must honor this commitment. Therefore, all (100%) of the remaining public lands including roadless areas must be managed for multiple-uses in order to avoid further contributing to the excessive allocation of resources and recreation opportunities for exclusive non-motorized use.		
		Our observations of recreationists on multiple-use public lands from 1999 through 2012 is summarized in the table above (yearly data sheets available upon request) and demonstrates that out of23,171 observations, 22,571 recreationists or 97% of the visitors were associated with motorized access and multiple-uses. Additionally, of the total number of people visiting public lands, 39% (8,961 I 23,171) were associated with OHV recreation. Furthermore, and most importantly, out of the 10,004 (8961 + 443 + 198 + 159 + 243) visitors that we observed using trails, 8,961 or 90% were OHV recreationists and 1,043 or 10% were nonmotorized recreationists which includes mountain bikes which are a form of mechanized travel, Therefore, the use of trails is 8: 1 motorized versus non-motorized and the use of all routes is 13:1 mechanized versus non-motorized. Therefore, nearly all (97%) of the visitors to public lands benefit from management for multiple-use and benefit from motorized access and mechanized recreational opportunities which are consistent with our observations. Therefore, 90% of the trail users are motorized and 94% when including mountain bikes which enjoy using the same trails. Therefore, in order to be reasonably responsive to the needs of the public at least 90% to 94% of the trails system and public land should be managed for multiple-uses including motorized access and recreation.		Observations of use on trail systems outside of the planning area and conclusions drawn from these observations are not within the scope of this planning effort.  The decisions that have been made through this process account for the many factors and interests involved in multiple use forest management and have resulted in a net increase of 13 miles of motorized trail under Alternative 4, the preferred alternative.
		The wildlife sections of many travel plan documents tend to promote two underlying themes; (1) wildlife and forest visitors cannot coexist, and (2) there are significant negative impacts to wildlife from visitors to the forest. Observations of wildlife in Yellowstone and Glacier National Parks and the 600 deer that live within the Helena city limits combined with common sense tell us that wildlife can flourish with millions of		The purpose of the wildlife analyses conducted for the Blackfoot Travel Plan is to disclose potential effects on species resident to the planning area resulting from implementing the travel plan.

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		visitors and motorized vehicles.		Lack of these disclosures would be imprudent of the agency. The effects analyses present a range of effects, with some effects more harmful to species than others effects. The report does not imply that species and humans cannot coexist and actually includes design elements for the travel plan to mitigate potential effects on wildlife. Application of design elements is common practice in order to address and minimize potential human-wildlife conflicts where these interactions occur such as in forest landscapes.
				It is not uncommon for people to witness wildlife appearing as being "comfortable" around humans in interface situations such as suburban communities. The mere fact that wildlife and humans may share space in certain situations, like suburban areas, national parks, and forest campgrounds does not mean the individual species is not experiencing stress. Coleman et al. (2013) provides good examples of how grizzly bears adjust their movements during peak times of human use of popular trails in Yellowstone

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				National Park. Similarly, Joslin and Youmans (1999), Effects of Recreation on Rocky Mountain Wildlife: A Review for Montana, provide multiple examples and a range of effects on forest carnivores that can be anticipated to occur when humans recreate in forest landscapes.
		The road density criteria is not valid because hundreds of deer in Helena and elk in the Montana City area exist just fine with road densities far in excess of the targets for the project area. Obviously there are other factors that have a far greater influence on deer and elk populations and the analysis must uncover and use those.		The effects of open motorized routes on elk habitat use and distribution are well documented by the scientific community. See Appendix F.
		The actual zone of influence of motorized trails on wildlife is very small and is different than that of roadways. The forest plan amendment must reflect these differences in characteristics.		Appendix F discusses the effects of motorized routes, as well as the density of motorized routes on elk. This analysis of the FP amendment also discusses the influence of the frequency or amount of motorized use on routes and this effect on elk (p.8). Elk response to motorized disturbances is well-studied and documented in the scientific community including Johnson et al. 2000; Edge and Marcum 1991; Rumble et al. 2005, Stubblefield et al. 2006, Lyon and Canfield 1991 etc.
		"Present day populations of white-tailed deer and elk are at their highest levels recorded in recent history" (Montana Wolf Conservation and Management Planning Document, Montana Fish, Wildlife and Parks, January 2000		Appendix F provides data on elk numbers and bull to cow ratios according to MFWP aerial survey results. As

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		(http://www.fwp.state.mt.us/wildthings/wolf/wolfmanagementO 11602.pdf). Additionally, "nearly 60 percent of Montana's original elk management units exceed elk-population objectives, while only 31 percent exceed harvest objectives" (www.fwp.state.mt.us/hunting/elkplan.html).		described in Appendix F, elk numbers alone do not equate to elk population objectives.
		Additionally, the Northern Continental Divide Ecosystem (NCDE), outside of Glacier National Park, has grizzly bear population densities of about 1 bear per 20-30 square miles We are a locally supported association whose purpose is to preserve trails for all recreationists through responsible environmental protection and education and has human recreation consisting of motorized access, motorized recreation, hiking, fishing, camping, horseback riding, and big game hunting. Glacier National Park annually receives approximately 2-3 million visitors, does not allow hunting, and has grizzly bear population densities estimated at about 1 bear per 8 square miles. The Yellowstone Ecosystem (YE) which is comprised of Yellowstone Park and surrounding National Forests, receives more visitation than Glacier Park and has an increasing grizzly bear population estimated at 1 bear per 30-50 square miles (http://www.r6.fws.gov/endspp/grizzly/bittereis/deischp2.htm). All indications are that grizzly bear habitat is fully occupied and that additional road closures and obliteration will not produce any more bears and, therefore, motorized closures are not reasonable or productive. Further evidence of this condition is the fact that grizzly bears are moving out onto the prairies around Valier and Choteau. Therefore, grizzly bears can coexist at reasonable population densities with multiple-use recreation and there is no compelling reason to close roads and trails to motorized recreationists to increase grizzly populations because the most significant constraint is their need for so many acres between other grizzly bears.		Coleman et al. 2013 provides good examples of how grizzly bears adjust their movements during peak times of human use of popular trails in Yellowstone National Park. This study is a good example of how wildlife can adjust their behavior due to human influence. Non-avoidance of human activities does not equate to a lack of stress felt by an animal. Toleration of human activities by wildlife is often necessitated by the instinct to survive.  Documentation of urban and suburban deer is a good example of wildlife toleration of human activities. Limited movement by Yellowstone bison from snowmobile activities is another example tolerating human activities in order to survive.  The purpose of the Blackfoot Travel Plan is to balance public access to national forest lands and opportunities therein with the habitat needs of resident wildlife species, not to exclude humans from the forests.

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		Furthermore, Kate Kendall's Greater Glacier Bear DNA study (includes all the North Fork of Flathead), which identified 367 unique individual bears with one years data not yet analyzed.  The recovered population target was 600 bears for the entire Northern Continental Divide Ecosystem, so there is already known that about 2/3 of that target exist on about 114 of the habitat. Completion of DNA study of the rest of the ecosystem is certain to show that bear populations far exceed the recovery goal and should be delisted. The study was released in December 2006 and indeed did confirm that there was more than 545 bears in the ecosystem (http://www.greatfallstribune.com/apps/pbcs.dlllarticle? AID=2006612240302 ).  Furthermore, a study released in September 2008 found that there were at least 765 grizzly bears (http://www.helenair.com/articles/2008/09/17/top/55st 080917 grizzlies.txt. It is clear that the grizzly bear populations are healthy and that motorized recreationists should no longer be shut out of grizzly bear habitat. As of 2007, the grizzly bears in the Yellowstone region have been delisted.		In 1975, grizzly bears occurring south of Canada were given their threatened status under ESA (IGBC 1986). Even with established conservation management programs and continued protection under ESA it has taken 40 years to reach the recovery goal for the species to support delisting in the NCDE. Continued strategic management is necessary to maintain this recovered status of the species so that a fair balance of human access, including motorized access, on national forests, parks etc. does not jeopardize recovery and result in the relisting of the species. The purpose of the Blackfoot Travel Plan is to balance public access to national forest lands and opportunities therein with the habitat needs of resident wildlife species, including the grizzly bear and not to exclude humans from the forests.
		Therefore, there are no compelling reasons "to elevate the level of elk security in the project area and enhance elk populations" (example; Fish, Wildlife and Parks letter dated February 27, 2002 to Helena National Forest on the Clancy-Unionville Travel Planning Project, bottom of page 9). Additionally, there are no compelling reasons to justify reduced road densities as a sought-after or necessary wildlife management criterion. Lastly, there are reasonable alternatives including permit hunting and seasonal travel restrictions that can better accomplish the outcome sought		Appendix F provides a detailed discussion on the relationship of road management and elk populations.

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		by reduced road and trail densities. NEPA requires consideration and implementation of all reasonable alternatives. Not considering and implementing reasonable alternatives demonstrates a predisposition in the process.		
		Road density criteria must be used with reasonable judgment and consider the mitigating effects that an adjacent block of roadless area has on a roaded area that exceeds the desired road density. Oftentimes these areas that exceed the ideal density are very valuable multiple-We are a locally supported association whose purpose is to preserve trails for all recreationists through responsible environmental protection and education. Motorized areas and border on large roadless areas that provide more than adequate wildlife security thereby effectively mitigating the impacts associated with the roaded area.		Appendix F, Alternative B, defines security as an area of at least 1000 acres in size that is at least ½ mile from a motorized route open to the public between 9/1 and 12/1. Roadless areas that meet these criteria are included as security.
		Road density does not equal motorized trail density. Impact information developed based on roads should not be used to estimate impacts from ATV and single-track motorcycle trails. ATV trails has far less impact than roads in all resource areas and motorcycle single-track trails have far less impact than roads in all resource areas. Motorized trails have less impact than roads and this condition must be recognized during the analysis and decision-making.		The Wildlife Specialist Report analyses take into account the effects of all motorized use (roads and trails) including offroad motorized use (p.149). Most studies do not distinguish between types of motorized use (vehicles, ATVs, motorcycles) as the effect, or distance of influence, appears to be similar. Likely, more research is needed in this area. However, there is strong evidence that suggests that the greater amount of motorized use and higher the density, regardless of the source, the less wildlife are able to utilize adjacent habitat (Johnson et al. 2000; Rumble et al. 2005; Montgomery et al. 2013; Kasworm and Manley 1988).
		A recent Grizzly Bear study in the Swan Valley of Montana found that 99		Conditions of forested stands

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		percent of the bears spent 99 percent of their time on Plum Creek property. This property has been heavily logged resulting in undergrowth plant species that support bears. Thick and overgrown timber does not allow for adequate undergrowth. As we now see by this study, critical bear habitat is quite different than what was once assumed and this new information must be incorporated into this evaluation. The Forest Service should discard the original "road density guidelines" and develop new guidelines that reflect the habitat most critical for bears as one that is timber harvested and roaded. Old outdated science formulated by assumptions should not be used when true science and actual data is now available.		is not applicable to this project as its focus is non-winter travel planning. The suggestion for the Forest Service to discard current access management guidelines in grizzly bear habitat is outside the scope of this project as current grizzly bear management direction was a joint agency effort spanning many years of planning, studies, and implementation.
		A December 31, 2003 Federal Court ruling found that associated with actions taken under the endangered species action must be paid to the public. The case stemmed from the government's efforts to protect endangered winter-run chinook salmon and threatened delta smelt between 1992 and 1994 by withholding billions of gallons from farmers in California's Kern and Tulare counties. Court of Federal Claims Senior Judge John Wiese ruled that the government's halting of water constituted a "taking" or intrusion on the farmers' private property rights. The Fifth Amendment to the Constitution prohibits the government from taking private property without fair payment. "What the court found is that the government is certainly free to protect the fish under the Endangered Species Act, but it must pay for the water that it takes to do so," said Roger J. Marzulla, the attorney representing the water districts that brought the claim. This same standard should also be applied to the economic and motorized recreational losses that the public has suffered under the ESA.  (http://www.uswaternews.com/archives/arcrights/4caliwate2.html)		This court citation is not specifically related to travel planning. The applicability is not clear.
		Forests are a renewable resource and impacts associated with cutting units are relatively short-lived. Therefore, motorized routes that were closed due to timber harvests should be reopened (returned to pre-harvest condition) now because the vegetation and cover has been reestablished. However, most of the motorized closures associated with cutting units have been long-term. All forest planning and travel management planning actions must now evaluate all past motorized closures including road and trail obliterations done to mitigate wildlife security concerns as part of timber harvest. It is		Motorized routes associated with timber harvest were created in order to facilitate timber harvest and forest health and protection measures. Many of these routes were not created with the intent of supporting the

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		logical and fair that once the harvest area has been re-vegetated, then the motorized closures must be lifted. Additionally, the cumulative negative impact of these types of closure actions on motorized access and recreation must be adequately evaluated and mitigated by this action.		heavy recreational use that now exists.  Planning efforts, such as this one, seek to adapt the management of resources such as logging roads, recreation, and wildlife to current conditions. For a multitude of reasons some routes may be deemed appropriate for motorized recreation while others may not.
		The 3-State OHV decision required that site-specific planning be analyzed at a number of different scales and across different boundaries. This requirement and commitment made to the public includes a site specific wildlife impact analysis for each motorized route.		The analysis completed for this travel plan did consider effects from each motorized route as well as the larger travel system under analysis. The analysis as disclosed in this FEIS documents compliance with laws, regulations and the Helena National Forest Plan (with the proposed amendment), consideration of wildlife impacts can be found in Chapter 3.
		Implement seasonal closures, where required, with input and review by OHV recreationists that will:  A. provide the maximum amount of OHV recreational opportunity during the summer recreation season in order to disperse all forms of trail use and thus minimize impacts to trail users;  B. provide winter OHV recreation opportunities in low-elevation areas that are not critical winter game range;  C. provide OHV recreation and access during hunting season by keeping major roads and OHV loops open while closing spur roads and trails		The planning process addressed varied seasonal closures in the formulation of the 4 alternatives. Factors such as wildlife security, recreational use patterns, and forest visitor experience were taken in to account in this process.

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		necessary to provide reasonable protection of game populations and a reasonable hunting experience; and D. provide OHV recreation opportunities during spring months in all areas where wildlife conditions reasonably allow.		
291 4/22/13 Munther MBHA, BHA, MWF	Big Game Security Amendment is based on an inappropriately applied and unvalidated model.	Assumptions in the DEIS regarding the proposed amendment to Big Game Standard 4a states that one of the rationales to alter the big game standard is that the Forest Plan is old – 27 years old (DEIS 490) and conditions have changed. The DEIS also deduces that distance from a road is the primary factor that affects elk security (DEIS 490), but that forest cover has little effect on elk security (DEIS 501). Therefore, the proposal would amend the existing Big Game standard by substituting the minimum requirements of the unvalidated 22 year old Hillis "Model" and it suggests that the model would be applied on other forests subsequent to this action (as well as other "east-side" forests, DEIS 491).  The Hillis Model was developed 5 years after the Helena Forest Plan was implemented. So, similar to the Helena Forest Plan, it also relatively old but is still unvalidated for east-side (of the Continental Divide) forests. If age alone disenfranchises standards in the Helena Forest Plan, then the Hillis Model, now over 22 years old, would not apply either. However, if all criteria, methodology, and caveats of the Hillis Model were applied to the HNF, then the amendment might read something like the following, which would then need to be validated, before being adopted as the Elk Security Standard on the Helena National Forest:  "When security areas comprise more than 30 percent of the fall use area of an elk herd unit (EHU), management activities shall not reduce the amount of security areas from September 1 through December 1 (archery and big game rifle season) to less than 30 percent*. Where security areas comprise 30 percent or less of the fall use areas of an elk herd unit during the archery/general rifle seasons, management activities shall not result in a further reduction, and restoration of at least 30% security areas will be the priority in project planning and travel plans." Expansion of patch sizes, buffers from roads, and security areas will be applied where necessary to bring bull elk survival up to minimum		Appendix F includes consideration of these comments as reflected in the Forest Service Responses to Public Comment Statements (PCS) 335-367. However, in order to demonstrate that these comments have been addressed, we have listed the individual comments associated with this letter and respective response. We also utilized information from shared at the April 15, 2013 meeting between Forest Supervisor Riordan, Denise Pengeroth, and BHA and others.  Specifically, Appendix F addresses the fact that the Hillis Paradigm was crafted in 1991: "The underpinnings of this methodology— i.e., elk tend to avoid open, motorized routes during the hunting season—has been reinforced through the work of Unsworth and others (1991, 1993), Rowland and others (2000, 2005), and Proffitt and others

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		least 15 bulls:100 cow elk). *The analysis for Elk Security was run at an elk herd unit.		(2011), to name just a few."
		Existing Helena National Forest Big Game Standard 4a (DEIS, Table F-1, below) was based on extensive peer reviewed, published science (Lyon et al. 1985, Basile and Lonner 1979, Burbridge and Neff 1976, Coggins 1976) and was incorporated into several Region One Forest plans and has served as the standard for big game security for nearly 30 years.		Appendix F includes a discussion on the basis for the existing Forest Plan Standard 4(a) in the section "Relationship of Forest Plan Big Game Standard 4(a) and Elk Management".
		When the Helena Forest Plan was written in 1986 there were far fewer roads and more vegetative cover on the forest. At that time, HNF Forest Plan Standard 4a provided big game security based on a certain amount of hiding cover and a commensurate allowable level of motorized routes. Now, after 27 years of roads constructed for projects and illegal user-created motorized route proliferation and concurrent forest cover decline as result of timber sales and insect infestation, the HNF now seems to find that it cannot meet its obligation to big game security (Standard 4a). The Helena needs to demonstrate that each of the projects and road construction approved since Plan implementation were designed and implemented to protect levels of elk security specified in the current standard. We contend the Helena has not actively managed motorized routes relative to direction in Forest Plan Big Game Standard 4 and cover to meet 4a in timber and road decisions. The proposed solution is to change the security standard that has been in place for nearly three decades rather than address how Forest Plan implementation has violated its own forest plan standards for big game security for 27 years. Big Game Standard 4 decisively states "Implement an aggressive road management program to maintain or improve big game security."		Appendix F states that "Concern was expressed by the public that decoupling the hiding cover requirement from big game security could impact other species that may be declining in Montana (Newell and Kujala 2013). However, several Forest Plan standards remain in place that govern cover management (See Table F-2) and provide for other species (e.g. mule deer). Future project level NEPA analyses will need to assess consistency with these Forest Plan standards."
		We point out "aggressive" and "maintain or improve" leaves little doubt about priority to maintain or improve big game security.  The Helena National Forest Big Game Standard for security not only affects elk, but also several other species including mule deer and moose. Moose (Montana Outdoors, March-April 2012 www.FWP.MT.GOV/MTOUTDOORS) and mule deer (Newell citation) numbers are declining throughout western Montana resulting in restricted seasons on mule deer and extensive		Appendix F includes two alternatives; Alternative A is the existing condition.

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		research needing to be done on moose. Relaxing maintenance of forest cover is not a responsible option for any species of big game on the HNF, especially when forest cover is naturally declining.		
		Retain existing Forest Plan Standard 4a until such time an amendment that incorporates all of the criteria required in the Hillis Model can be fashioned and then thoroughly validated for the Helena National Forest. We are not necessarily against consideration of a new proposed Big Game Security amendment that might be based on spatial distribution of large blocks of security habitat away from motorized routes. However, the Helena Forest needs to demonstrate, with specific science based evidence that the Forest will provide the expected big game security, while not compromising other forest standards. If the proposed standard cannot be validated to achieve what it is purportedly able to do, and causes unintended consequences, then existing standard 4a would remain in place.		
	The EIS has misused the State of Montana's Elk Plan in its use of population data to reflect elk security and thus false justification for amending Big Game Standard 4a (security).	The DEIS erroneously states that elk population levels are independent of hiding cover because in some areas elk populations are strong even though cover has declined as a result of insect infestations. Therefore, the DEIS concludes that hiding cover is not an issue for elk populations. This is an erroneous interpretation of security. It is bull elk survival that reflects security as described by the Montana Elk Plan, not elk population numbers. So the DEIS is mixing apples and oranges. It does not focus on survival of the bull elk component of the population, which provides the bulk of hunter opportunity, but rather it erroneously delves into total elk population issues to assert that because some elk populations are meeting population objectives, the lack of cover in areas of the HNF is irrelevant.  Bull elk survival is correlated with road density. Unsworth et al. (2001) notes that the probability of mortality for a bull elk is 50 percent greater in an area with one mile of road per section than an unroaded area. Two miles of road/section doubles the mortality probability, and at higher road densities bulls usually do not survive the hunting season. The table below takes road density information from both the Blackfoot DEIS and the Hazardous Tree and Fuel Reduction Project. Discrepancies exist in the data. Both documents claim to use open road densities during the hunting season; they do not factor in the impact of existing but closed roads, or reclaimed road prisms and conduits of travel for hunters and thus incursions into otherwise secure		Appendix F includes a discussion of the how elk numbers have increased since the crafting of the Forest Plan despite recent losses in hiding cover. Hiding cover is recognized as being important to the long-term viability of elk populations in Appendix F; and Appendix F includes identification of those Forest Plan standards that would remain in place that provide for cover considerations.  Appendix F also includes a discussion of bull to cow ratios within the respective hunting districts that overlap with the Blackfoot Travel Planning area.

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		Unlike the DEIS (Table F-6), analysis of MWFP data (a tabular comparison is provided in the letter), this table shows that all Elk Herd Units are at or below objective for bull:cow ratios, which is the Montana Elk Plan indicator for security. Management implications for forested cover would be relaxed with the proposed amendment to allow more forest cover removal and thus an amended standard could lead to greater road density. The possibility and even likelihood of reducing cover even further if the proposed amendment is implemented would not be in the best interest of bringing bull numbers up to objective. Bull elk provide the majority of elk hunting opportunity in Montana. Cow elk generally are hunted on a permit basis. When security is inadequate on public lands, acceptable bull:cow ratios (bull populations) cannot be maintained. The Montana Elk Plan (2005) defines minimum bull:cow ratios for each Elk Management Unit. The desired ratios are not being regularly achieved within the Hunting Districts that constitute the 8 Elk Herd Units within the Blackfoot Travel Area.		Appendix F includes of discussion of the role of closed roads in calculating security in Big Game Amendment Alternative B.  Appendix F includes tabulation of bull to cow ratios within the respective hunting districts that overlap with the Blackfoot Travel Planning area. That tabulation indicates that not all hunting districts are at or below bull to cow ratios.
		The DEIS correctly indicates that excessive roads are the leading cause of low bull ratios, but it inappropriately concludes that forest cover is unimportant. The MFWP Elk Plan explains that in hunting districts that have public lands, elk populations can be controlled with antlerless elk permits only if elk security is adequate on public lands. In other words, public lands must be able to "hold" elk via adequate security so they will not be displaced to private, unhuntable private lands. When elk are displaced to private lands, population levels cannot be controlled with hunting seasons.  The DEIS wrongly concludes that the current elk numbers which are, at times, above elk population Objectives are evidence that present elk security is sufficient. In fact, MFWP has documented movement of elk to private lands within the Blackfoot planning area where hunting of elk is extremely limited or not allowed.		Appendix F recognizes the MFWP "relies on bull to cow ratios measured through aerial survey trend counts. These trends are used to determine and adjust harvest regulations that allow MFWP to achieve their elk population objectives (MFWP 2004)".  Big Game Security Amendment Alternative B was built in conjunction with MFWP as described in Appendix F.
		Due to lack of hiding cover security and excessive road density, displacement of elk from HNF public lands has occurred on all portions of		

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		the HNF, resulting in elk displacement to private lands and game damage complaints from many private landowners. [[Settle, Grady, Sandru, Shockley, Mannix, Grossfield, Jacobsen]] And harboring by others (Meyers Ranch, Croissant, old Vincent Ranch)]]] So, when:  1) security is not adequate on public lands, 2) elk are displaced to private lands, 3) public hunting opportunity is diminished, and then 4) wildlife numbers become unmanageable. In an unsubstantiated justification of low population numbers in two EHUs with very low security, the DEIS states that the cause isn't really lack of security. Without providing supporting information, the DEIS (pg. 499) states that low elk populations in these two EHUs are due to predation. The DEIS contends that the lack of security (only 18 % and 19%) is not a factor, but predation is. In a travel planning document where security is the heart of the issue, blaming predation in areas where security is excessively low is a surprising deflection of the issue at hand.		Appendix F states that "Concern was expressed by the public that decoupling the hiding cover requirement from big game security could impact other species that may be declining in Montana (Newell and Kujala 2013). However, several Forest Plan standards remain in place that govern cover management (See Table F-2) and provide for other species (e.g. mule deer). Future project level NEPA analyses will need to assess consistency with these Forest Plan standards  Appendix F states that "The assumptions built into the existing (1986) standard 4(a) have not proved useful in gauging or guiding management activities under the Forest Plan. Actual elk populations and trends as monitored over the last twenty six years simply do not correlate with this existing standard or its assumptions.

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				Elk numbers have consistently increased during this time period and the existing standard needs to be revised to address recent elk management challenges".
				Appendix F includes a tabulation of the management challenges associated with each hunting district that overlaps with the Blackfoot Travel Planning area. Those challenges are excerpted directly from the Montana Elk Plan 2004. The analysis in Appendix F indicates that "there is not a strong correlation between achievement of Forestwide Standard Big Game 4(a) within a particular EHU and the actual performance of the elk population within the relative Hunting District"
	The programmatic amendment fails to follow all necessary criteria as set forth in the Hillis Model and does not describe referenced	The referenced "specific guidelines from Recommendations for Big Game Habitat Management" are not described or further referenced, yet the entire amendment is said to be based upon them. Lacking specifics regarding the guidelines of a working group document, it must be assumed that the Hillis Model as described in peer-reviewed literature is being applied.  Elk Security analysis at the Administrative Boundary level was never displayed in the DEIS. If it had been, security would have been woefully inadequate for several of the EHUs.  This approach would negate the Model's effectiveness altogether within Elk		Appendix F references the U.S. Forest Service and Montana Department of Fish, Wildlife, and Parks Collaborative Overview and Recommendations for Elk Habitat Management on the Custer, Gallatin, Helena, and Lewis and Clark National Forests and includes detailed discussions on the formulation

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	guidelines for its application.	Herd Units that extend across various land ownerships. The proposed amendment specifically would exclude analysis of the EHU outside of the HNF boundary – something the model specifically cautions against. The Hillis Model clearly indicates that a minimum of 30% of the EHU or larger area is necessary for security. However, the proposed amendment makes no provision for more than 30% security even though the Helena National Forest is lacking in rugged, broken topography, lacks continous conifer cover and is highly fragmented with roads. Neither does the proposed amendment describe, for this particular landscape, what the ideal security percentage should be. However, Hillis et al. (1991) is clear that provisions of the Model would have to be expanded for open, gentle forests such as on the Helena Forest. Again, the proposed amendment specifically thwarts this most important provision by allowing for only 30% elk security, and then only within the HNF Administrative Boundary. Limiting application of security to within the Administrative Boundary only, would artificially shrink big game security even further. Even more egregious is the proposal to accept existing EHUs with less than 30% security, with the caveat that security levels will not be allowed to go lower. It is irresponsible not to propose restoration of elk security in any new Proposed Standard.  Commenters strongly disagree with the footnoted proposal because the DEIS does NOT display the consequences of this proposed amendment at the Administrative Boundary level upon elk security. The information presented in the EIS/proposed amendment does not relate to the area in which the proposed change would take place: "at the ADMINISTRATIVE BOUNDARY". Instead the reviewer is lead to believe that the security acreage presented in tables represents the proposal, but it does not because the proposed 30% security proposal is only applicable to that portion of an elk herd unit within the HNF Administrative Boundary, while the tables display security acreage for the		of Big Game Amendment Alternative B.  Appendix F provides the rationale for the unit of measure within which the Big Game Amendment Alternative B would apply. Under this Alternative, security is defined as greater than or equal to 1000 acres in size which is consistent with Hillis et al. (1991) that their model be expanded for open, gentle forests and be tailored to local conditions.  Further, Appendix F provides a discussion on the unit of measure associated with Alternative B (which includes private land within the administrative boundary) and further indicates that the herd unit would continue to provide the basis for future analyses.  Appendix F includes a discussion of the intent of Hillis et al. (1991) that "strict adherence to the guidelines should be avoided". It also includes a discussion of the letter by J. Michael Hillis and L. Jack Lyon dated 4/12/13.

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		remain within the administrative boundary. But actually, across the entire EHU, cover would be depleted down to 11% over the elk herd unit. In short, the new proposed standard's criteria of 30% security within the Administrative Boundary of the HNF completely circumvents the intent of the Hillis Model		
		The proposed amendment circumvents the original intent of the Hillis Model by limiting its application to the Administrative Boundary of the Helena National Forest, and it therefore should not be accepted.  We contacted two principle authors of the 1991 Hillis Paradigm paper (Mike Hillis and Jack Lyons), and requested their response to the Helena's proposal to apply the model to the Helena forest conditions. Below and as an attachment is their response: see letter for this one page attachment signed by J Michael Hillis and L.Jack Lyon dated 4/12/13 The above statements by two principal authors of the Hillis Paradigm emphasize that the 1) variables were selected arbitrarily and no statistical analysis was completed and 2) no less than 30% an elk herd unit (EHU) meet these security conditions 3) it would be imprudent to apply the paradigm without consultation with local biologists and researchers 4) there is more up to date science available		
	The proposed amendment inappropriately imposes the Hillis Model on the open, topographicall y gentle "eastside" Helena Forest – something that authors of the model cautioned against.	The Model was specifically designed for "west-side" forests (west of the Continental Divide) where topography is more rugged and forests more dense. Hillis et al. (1991) clearly indicates that security patch sizes should be enlarged, roadless buffers around cover should be enlarged, and the percentage of the area serving as security should be enlarged for forests having more open and gentle terrain. These provisions have not been adequately addressed in the proposed amendment.  An analysis of the Hillis Model was conducted for the Bighorn National Forest of northeastern Wyoming, entitled A Rocky Mountain Elk Conservation Plan for the WGFD Sheridan Region (Wyoming Game and Fish Department, Sheridan Region 2004). The Bighorn National Forest lies east of the continental divide, and like the Helena National Forest, the terrain is more open with less topographical relief than west-side forests. The Wyoming study clearly indicates that cover is essential to elk survival on the Bighorn National Forest and its findings run counter to the unvalidated amendment being proposed for the		Appendix F provides a discussion of how Big Game Amendment Alternative B was tailored to local conditions based on local knowledge consistent with Hillis et al. (1991).  Appendix F also includes a discussion of the Bighorn National Forest analysis.  Big Game Amendment Alternative B defines security as including patch sizes greater than or equal to 1000

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		Helena National Forest The Bighorn National Forest analysis found that forested cover had been reduced to 24% of its biological potential since pre-forest plan levels of the 1960s. The Bighorn National Forest could not meet the required 30% security for an analysis unit (Wyoming Game and Fish Department, Sheridan Region 2004). Unless and until field analysis of the Hillis Model is analyzed as has been done on the Bighorn National Forest in Wyoming, its application could seriously harm elk, elk habitat, and hunter opportunity. Hunter opportunity on the Bighorn National Forest has plummeted as a result of "accelerated timber harvesting [that] sent former elk hiding cover to the sawmills and logging roads permeating previously secluded areas" The Hillis Model has not been successfully applied to open forest landscapes. Therefore, carte blanche application of this model on the Blackfoot and Divide areas of the Helena National Forest (and other east-side forests as listed in the DEIS:Lewis and Clark, Custer, Gallatin), in the name of big game security, is at best inappropriate and premature, and at worst, reckless.  It is inappropriate and professionally irresponsible to advocate application of an elk security standard until there is validation that the proposed standard criteria (nonlinear 250 acre patches ½ mile from a road) are successful in actually holding elk during the hunting season. We know of no other elk vulnerability findings in Helena NF type terrain and cover that demonstrate that elk are successfully retained under such cover and road criteria as are being proposed. We request display of all findings that the Helena is using for justification of the proposed amendment.		acres.
	The importance of forest cover is totally omitted as a security if the proposed Big Game Security amendment is adopted.	he DEIS boldly states:  "In a word, the big game security index, as now formulated, is insensitive to real changes in elk security and it places impractical constraints on Forest management and on the ability of the public to use the Forest (even though the allowed use is not detrimental to elk security)." (DEIS 489). This sentence provides insight to the thought process of the HNF on several levels. First it concludes that the current big game standard did not function properly; it indicates a desire to throw off previous "constraints," and it suggests that public use has not been detrimental to elk security. In addition, the above statement directly		Appendix F includes consideration of Christensen et al. (1993)  Appendix F includes maps of elk security for all four alternatives under the Big Game Amendment Alternative B.

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and date		contradicts the Forest Service Intermountain Research Station report, Elk Management in the Northern Region: Consideration in Forest Plan Updates or Revisions (Christensen et al. 1993):  "As you move east into Montana and over the Continental Divide, cover considerations become more important because cover is less abundant and less contiguous Where coniferous cover may be a limiting factor, it will be important to develop long-term perspectives (rotation length) on cover management that address condition, quantity, location, and configuration."  The DEIS does not disclose the existing level of hiding cover under the Forest Plan definition and thus the level of change that would be allowed under the proposed amendment. The DEIS (484) notes that the minimum cover patch would be 250 acres and that: "Smaller areas [of cover] are often eliminated."  The DEIS allows for off route travel for 300 feet on either side of a road. This provision whittles down the possible buffer area surrounding patches of security and potentially eliminates areas that might otherwise be considered security areas under the proposed amendment. Without MAPS of security areas comparing the existing and the proposed standard for big game security, there is no way to visually grasp how security would be distributed across the landscape.  Table B ( <i>included in letter but not copied here</i> ) describes hiding cover and security from the 2013 Blackfoot DEIS compared with the 2010 Hazardous Tree Project. Disturbing discrepancies in data exist leaving Commenters to wonder which is correct and how responsible decisions can thus be made. If 30% of an elk herd unit (EHU) were to consist of areas of security, each EHU could legally be managed for minimum acreage as described in Table B and result in much more fragmentation. Table B raises concerns about how elk hiding cover has been displayed in the past. Comparing Column E and F shows that the new method of establishing cover is probably more realistic and yet the security level would be reduced even	Statement (PCS)	(The Hazardous Tree Removal and Fuels Reduction project was decided in 2010; we have more updated road information associated with the Blackfoot Travel Plan)

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	To be effective, any big game security standard must be applied for the duration of the hunting season, from September 1 to December 1, however the proposed dates are only for the Oct 15-Dec 1 period.	The archery season currently extends from the first Saturday in September for approximately 5 weeks generally until one week before the opening of the general rifle season, which occurs in the latter half of October. Archery hunting is becoming more and more popular and comprises a growing percentage of all hunter-days afield. We suspect that, when evaluating public lands, the relative number of bow hunters as compared to rifle hunters is even higher. We find application of the proposed big game security amendment to apply only to the general rifle season – a serious oversight that ignores the displacement impacts by bow hunters. There are about 40,000 licensed bow hunters in Montana and most hunt at least part of the season on public lands, including the Blackfoot Travel Plan area. Proffitt, et al (2013), Grigg (2007) and others have documented the displacement of the of elk to private lands due to bow hunting activity. The distribution of bow hunters into the most secure habitats likely exceeds the distribution of rifle hunters because of longer hunting daylight in late summer/early fall, better travel conditions with a general lack of snow, and fewer motorized travel restrictions that are applicable to general rifle season hunters are not yet applied during bow seasons.		Big Game Amendment Alternative B defines security based on 9/1 closures.
	The cumulative impacts of the proposed Big Game Security amendment have not been addressed.	The HNF apparently assumes that the DEIS for the Blackfoot Travel Plan meet NEPA and NFMA requirements for analysis of the proposed amendment to the big game security standard. However, the environmental analysis for the Blackfoot travel plan will not suffice for a comprehensive analysis of the proposed forest plan amendment. Therefore, we are concerned that the consequences of the proposed amendment have not been considered.  The assumption that elk do not need hiding cover (DEIS 495: "eliminating hiding cover as a primary determinant of elk security") is not true for a variety of reasons and is a disservice to other big game species. Abandoning the hiding cover component of the security equation is akin to believing that a human house without a roof is perfectly adequate since the refrigerator and beds remain. And, abandonment of the hiding cover component of the security standard will affect other big game needs, including critically important forested forage.  While the proposed amendment would eliminate cover in the security equation, it would also allow more conifer removal (down to 30% of the cover		Appendix F identifies those hiding cover considerations that would remain in place associated with other Forest Plan standards that are not the subject of this amendment.  Appendix F provides a discussion on the unit of measure associated with Alternative B (which includes private land within the administrative boundary) and further indicates that the herd unit would continue to provide the basis for future analyses.

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		within the Administrative Boundary of the Forest), that would compromise other Forest Plan standards including habitat effectiveness, forage and thermal cover. Thompson et al. (2005) states, "Burning and logging are two of the main tools for enhancing elk forage. But, the forage is no good if the elk can't paw through the snow to obtain it. Ameliorating foraging costs is a major role that forest habitats play." He points out that cow elk " tend to increase their use of forest in most winters as snow depth increases and layers of crust form in the snow column. We see the highest use of Forest types in February when conditions are at their worst."  When a severe winter comes along, forested landscapes are essential to the survival choices made by wintering big game. Thompson goes on to point out that over 80% of bulls older than 2 years old live in the forest in most winters. "If we manage forests on elk winter range for no other reason, we manage them for bulls." As noted earlier, the bull component of the population drives hunter opportunity. Most of the hunting districts on the HNF that occur outside of Wilderness Areas are not meeting the elk plan bull objectives, therefore all measures related to both roads and conifer retention should be carefully considered. Commenters contend that the proposal to diminish the hiding cover component of the big game security standard is seriously misguided, untested, and a disservice to big game habitat and hunter opportunity on the Helena National Forest. We are likewise concerned the Big Game Security Standard amendment being proposed on the HNF is awaiting adoption on other east-side forests – contingent upon its application on the HNF, as described when the amendment referenced "Big Game Habitat Management on the Custer, Gallatin, Helena, and Lewis and Clark National Forests" (DEIS 491).		Appendix F includes a discussion of the relationship of elk and their numbers to the existing Forest Plan Standard 4(a).  Appendix F provides the purpose and need for the Big Game Amendment and does not include adding more roadways.  Appendix F includes a cumulative effects analysis that discloses the effects of other amendments relative to the proposed amendment. It also includes a discussion of closed roads relative to security blocks.
		Another impact of implementing the Hillis Model only within the administrative boundary of the HNF, is such application would allow more motorized use and road construction on the Forest because only 30% security in the administrative boundary would need to be retained according to the proposed amendment. However, the Helena NF is already overly endowed with motorized routes: there are approximately 2,000 miles of road on the HNF according to the 2004 HNF Roads Analysis.  DEIS states that travel management has been "unnecessarily and impractically constrained" as a result of the existing big game security standard (DEIS 501), and that the proposed amendment would be a more		Appendix F includes private land discussions and references Proffit et al. 2013.

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		equitable approach. However this logic is unsupported given current road densities and other resource impacts associated with motorized routes. In addition to forested forage, thermal cover, old growth forest, and water quality, the DEIS does not address consequences of the proposal to summer habitat effectiveness, consequences to forest fragmentation and therefore wildlife linkage corridors. One example of cumulative effects implications is in the assumption for wildlife movement corridors: "the fewer and larger the unroaded patches, the better the connectivity (the less the fragmentation)." But this approach provides no measure of cover continuity across the landscape and actually would removed smaller connecting patches – something that will affect a host of other standards across the HNF. The DEIS (484) notes that the minimum cover patch would be 250 acres and that: "Smaller areas [of cover] are often eliminated."  Habitat Effectiveness would be compromised because additional miles of road could be legally added to the landscape (See Table B) if the proposed amendment were implemented, but the consequences has not been evaluated. Wildlife literature documents that when road densities begin to exceed one mile per square mile of land that wildlife habitat begins to become disproportionately compromised, and that 50 percent of elk habitat is no longer effective once road densities reach 1.75 miles per square mile (DEIS 177). The Helena Forest Plan accepts a 50 percent loss of habitat when considering habitat effectiveness. While Commenters would prefer much more habitat retention, we are fervent in our conviction that public land wildlife habitat losses exceeding 50% are unacceptable.  It was suggested by FS personnel at a meeting held with Helena Ranger District at the Montana Wilderness Association office on December 10, 2008, that increasing road density could contribute as a management tool to reduce elk populations. This line of logic is flawed as noted in, Elk Management in the Northern Region: Considera		

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		(November 26, 2011 http://helenair.com/news/local/helena-watershed-conditions-worst-inregion/article_c737f0f2-17fa-11e1-9f90-001cc4c03286.html). The DEIS (65) notes:"Approximately thirty percent of the 6th-HUC watersheds covered by the Blackfoot travel planning area contain a stream that is impaired by sediment, including some of the major streams in this area (table 17)The Blackfoot Headwaters TMDL recommends a 30 percent reduction in system road sediment delivery reduction, and 100 percent for nonsystem roads (MT DEQ, 2004)."		
		The possibility of adding more roadways via the proposed big game security amendment is contrary to common sense. Contributing to an existing and severe water quality problem is yet another effect that must be considered in a responsible analysis.  These and other cumulative effects should have been analyzed in the DEIS for the proposed Forest Plan amendment to standard 4a, because the proposed amendment allows for significant change of the cover component. The Forest has not described, nor considered, the dissection of elk security by retention of road corridors of closed roads that subsequently serve as easy hunter travelways. Simply, these road corridors funnel hunters into the heart of otherwise secure areas for elk. They serve as much easier and faster routes for walking, bicycling and horseback hunters to penetrate otherwise secure areas. The Forest needs to account for the reduced effectiveness or take substantial on-the-ground modification to render these roadways useless as hunter corridors.		
		The DEIS omits adequate discussion of elk security on movement of elk to private lands during hunting seasons. The impact of an ineffective big game security standard is to render the Blackfoot Travel Plan area undesirable to elk and other big game relative to the hunter-restricted security areas provided by adjacent private lands. This movement has been recently documented by Proffit, et al 2013. Proffitt, in studies of two eastside Montana elk herds, documents hunting activity moving elk onto private lands, beginning during archery season and accelerated during general hunting seasons. Proffitt further documents road density on public lands as the primary predictor of elk being displaced from public lands during hunting		

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		season.		
	Inconsistent application of the Predecisional Administrative Review Process (also known as an Objection process) has occurred because a Forest Plan amendment for standard 4a was to be implemented for the same area prior to the Hazardous Tree Project of 2010.	An actual amendment was never described let alone evaluated even though Alternative 2 was selected and implemented for the Hazardous Tree Removal and Fuels Reduction Project (HNF file code 1950, August 23, 2010 DN and FONSI notice signed by Supervisor Kevin Riordan – attached). Helena Hunters and Anglers Association filed an Objection (as required for this project – 36 CFR 218) over the fact that the HNF did not provide any information relative to amending Big Game Standard 3 and 4a, even though the Forest acknowledged that such an amendment would be required if Alternative 2 of the Hazardous Tree Project were implemented, which it was, in 2010.  The HNF proceeded with the Hazard Tree Project and completed cover removal, without amending the Forest Plan for Big Game Standard 4a. That action severely compromised the cover status of the landscape and possible actions through pending travel planning that could have helped move the landscape toward compliance with Forest Standard 4a. Instead, the Hazard Tree decision allowed the HNF to enter eleven Roadless Areas for "hazardous tree removal" thus further compromising big game security. These Objections were raised by HHAA during the Hazard Tree Project/Forest Plan Standard 4a amendment back in 2010, but were not addressed by the Forest.  The Hazardous Tree and Fuels Reduction Project had known and irreversible consequences which have cumulatively diminished options that might have been available in the Blackfoot The Comment Process for the Hazardous Tree Removal Project fast tracked tree removal from a 300 foot swath along 488 miles (238 route segments). Thus, approximately 28 square miles of trees were allowed to be removed from the HNF along route corridors and were not evaluated travel planning process. That initial project was predicated upon the implementation of Forest Plan Standard 4a amendment. However, that amendment process was not executed as required.  The Summary analysis of the Hazardous Tree and Fuels Reduction Project Comment (HHAA September 23, 201		In the twenty eight years since the development of the Forest Plan, a substantial amount of scientific studies, surveys, and other information have accrued. Studies have suggested other measures that are also appropriate for measuring big game security, and are more closely tied to open motorized route densities during times of elk stress and increased vulnerability (i.e. hunting season). In addition, the elk harvest metrics used by the Montana Department of Fish, Wildlife and Parks (MFWP) to evaluate and manage elk vulnerability during the hunting season (the reason for providing security) have evolved, leaving part of the standard as currently written useless because it relies on data methods no longer available or in practice. A programmatic Forest Plan amendment for the Blackfoot planning area is needed to more closely align current science, local conditions, and other information with species needs that meet the intent of the Forest Plan.  The Hazardous Tree and Fuels

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		So, after hundreds of projects that have removed trees from the forest over the past 27 years, the HNF now finds that it cannot meet its Forest Plan Big Game Standard 4a, and therefore the Forest now desires to relax the standard rather than implement measures to enhance hiding cover. Although forest cover has diminished as a result of bug-killed trees, standing dead trees do provide a level of hiding cover (reducing sight distance). Once cut down, a tree, whether it is alive or dead does not provide any visual screening.		Reduction Project contained a project specific amendment to except standards 3 and 4a.
	Commenters were not notified at the time of scoping on the Blackfoot Travel Plan that the HNF would be using the Objection process to amend Forest Plan Standard 4a – Big Game Security, in association with this project.	With respect to amending big game security standards on the Helena National Forest, public participation processes have been inconsistently applied between 36 CFR 219 Subpart B, the "appeals process," and 36 CFR 219 the "Predecisional Administrative Review Process" (Objection Process) over the past four years. It is unclear how the HNF was able to require the public to file an official Objection in 2010 (which HHAA did) with respect to the Hazardous Tree Removal Project and amending Forest Plan standard 3 and 4a when "the Planning Rule had not yet been finalized." And, even though they provided no details about the required amendment, they moved forward with the project. Commenters question why HNF said they were unable to alert the public in 2010 during scoping, about the process they intended to use for the Blackfoot Travel Plan and Big Game Security amendment. Coincidentally, 2010 was the same year the HNF moved forward with the Hazardous Tree Project for which a big game amendment was clearly required but was not completed.		The Hazardous Tree and Fuels Reduction Project was conducted under HFRA which includes an objection process
	The Helena National Forest inappropriately proposes an amendment to the Helena Forest Plan	The Blackfoot Travel Plan area does not seem particularly unique with respect to big game security on the Helena National Forest. The same issue with proliferation of motorized routes, thinner forests, and past management that has compromised big game security – is found Forestwide. It is inappropriate to propose such an amendment only to a portion of the Forest when similar conditions are present throughout. The Helena Forest Plan was developed to provide guidance for the entire Forest. While there are reasons for geographically specific direction such as unique soils conditions or		Appendix F provides a discussion of how the proposed amendment would be consistent with goals and objectives articulated at the time of the Forest Plan decision.

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	only for the Blackfoot Travel Plan area.	special designations, we find proposing an Amendment specific to a single Travel Plan area unjustified. This is also a burden to public groups wishing to participate, especially in light that a similiar big game amendment process has been eluded for the Divide Travel Plan. Other East-side Forests have similar big game security issues. Therefore we request that this area-specific big game amendment process be abandoned in favor of a comprehensive Eastside Forest process that is more comprehensive and applies proper scientific method and peer-reviewed scientific literature.		
	Analysis Inconsistencie s	Contradictory information is provided in Appendix F. Numbers in tables are inconsistent. Table F-7 indicates that 3 of the EHUs meet the current standard (4a) for security; Table f-2 says 2 meet the standard. Other figures are inconsistent with the text. Table F-8 states that there is a lack of elk forage in some hunting districts, as evidenced by the fact that bull objectives are not being met, yet population objectives are being achieved. Forage cannot be blamed for low bull ratios, particularly when populations are healthy. The following assertion in the DEIS (493) does not appear to be true. No supporting documentation is provided, and it is not at all clear that forested cover will not be even more fragmented if smaller areas of forested cover are allowed to be removed:  "Both action alternatives serve to consolidate security areas into larger contiguous blocks resulting in an increase in total overall acres of security and a larger average size of security areas as compared to the existing condition."		Appendix F addresses inconsistencies found in the DEIS and includes security area maps by travel plan alternative.
		Where are the maps to support this contention? Where is the allowance for hiding cover regeneration? What potential hiding cover could be/is being recovered through regeneration?  What is the potential hiding cover in each watershed? What fragment of that occurs on the landscape today? GIS information could be realistically applied to answer these questions, but no such analysis is displayed in the DEIS (as has been done on the Bighorn National Forest of Wyoming to test the Hillis model for elk security – so it can be done).		Appendix F identifies the amount of hiding cover by herd unit which is the unit of measure for Forest Plan Standard 4(a).
	Effects to hunters	The proposed amendment to Big Game Standard 4a of the Forest Plan of the Helena National Forest will impact recreational activities of members by reducing quality and effectiveness of wildlife habitat and promotes movement of elk and other species onto private land, thus reducing hunter opportunity and ability to manage big game populations.		Appendix F includes a discussion of recreational opportunities including hunting as well as displacement of elk to private land.

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		Retain existing Forest Plan Standard 4a until such time an amendment that incorporates all of the criteria required in the Hillis Model can be fashioned and then thoroughly validated for the Helena National Forest. We are not necessarily against consideration of a new proposed Big Game Security amendment that might be based on spatial distribution of large blocks of security habitat away from motorized routes. However, the Helena Forest needs to demonstrate, with specific science based evidence that the Forest will provide the expected big game security, while not compromising other forest standards. If the proposed standard cannot be validated to achieve what it is purportedly able to do, and causes unintended consequences, then existing standard 4a would remain in place.		The existing Forest Plan Standard 4(a) is included as an alternative in Appendix F. Appendix F includes two alternatives carried forward and several not considered in detail. All of the Travel Plan Action Alternatives reduce open road densities.
	Requested Changes	While actions are clearly needed on the Helena to enhance big game security, merely a change in standards will not be answer. No amount of "amending the standards" will rectify a paucity of forest cover – an issue that would be muted because the proposed amendment seeks to decouple the issue of big game security from forest cover. We recommend any new security standard must compensate the current reduced forest cover situations with much larger public land blocks free of motorized uses during all big game hunting seasons. Travel planning to substantially reduce motorized use of the landscape to create these conditions is in order. This is clearly directed by FP Standard 4 "Implement an aggressive road management program to maintain or improve big game security."		See comment above regarding Bighorn National Forest.
		Because the Helena National Forest is an open, gentle terrain, heavily roaded "east-side forest," it is recommended that measures be taken to encourage forest regeneration and reduce road and route densities. Forest management must include retention of, and rejuvenation of, forested cover to benefit security. Research in the Big Horn Mountains of Wyoming demonstrated that forested cover had been reduced to 24% of its historic levels due to anthropogenic factors, and therefore the Bighorn Forest is unable to apply the Hillis Model as intended. This type of analysis has not been conducted for the HNF, but should be presented in the final EIS so all measures can be taken to bring big game security into compliance with either the existing standard or a new validated standard.		Appendix F identifies those cover standards that would remain in place.
		Outside of the Wildland Urban Interface, the HNF could retain both live and dead trees on the landscape and encourage conifer regeneration. Timber salvage operations in potential security areas only worsen the situation, because such salvage operations remove potentially down wood that		

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		inhibits hunter penetration, generates roads and skid trails that make hunter travel even easier, and reduce forested "tangles" that comprise secure big game habitat. process normally used to gather information and revise forest plans.		
		Develop a range of Big Game Security Amendment alternatives and full public participation when amending the Helena Forest Plan standard. As required by NEPA,		
		there was not a range of security alternatives portrayed nor analyzed for the current proposed big game Security Amendment. Any deviation from this proposal in the final		
		decision is therefore outside the non-existent "range of alternatives". We therefore assert any such deviation or change in the Amendment justifies at least an amended DEIS, a new analysis and a new Comment opportunity for the public.		
		Any elk or big game security amendment must include implementation processes or procedures to assure measured security is protected in the course of future Forest management, or that new security is created to offset security areas if a project proposal that may damage or lessen the effectiveness of big game security is contemplated.		
		The HNF must test any proposal to amend Forest Plan Standard 4a for big game security under rigorous scrutiny that, like all other natural resource standards, is ultimately based on peer reviewed scientific literature, and validation for its applicability on the Helena. Any new standard for big game security will likely remain in place for decades to come, and must prove to be a worthy standard for big game.		
		Hunting season road and motorized trail restrictions must be applied for the full hunting season from September 1 to December 1, not just from October 15 as the proposal now reads.		Big Game Amendment Alternative B includes this consideration.
		Describe the MDFWP/FS Big Game Working Group (2012) guidelines that are referenced on page 491 of the DEIS. Appendix F of the DEIS for the Blackfoot Travel Plan indicates that the proposal adopts specific guidelines for its application of the amendment but does not describe any of them. All guidelines and the methodology used in their application should be displayed		U.S. Forest Service and

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		so that an informed decision can be made relative to changing a Forest Plan Standard for Big Game that has been in effect for nearly three decades.  Full agreement and consistency with all 4 eastside forests and all pertinent Regions of MFWP with regard to any new proposed big game security standard. An open public participation process throughout the process is encouraged.		Montana Department of Fish, Wildlife, and Parks Collaborative Overview and Recommendations for Elk Habitat Management on the Custer, Gallatin, Helena, and Lewis and Clark National
		For any big game security amendment proposal, incorporate outside peer development and review of current literature and security knowledge using recognized wildlife biologists experienced in elk, deer, and moose security, in context with Helena vegetative conditions, topography and mixed ownership.		Forests is discussed in Appendix F
		Any measure of big game security for the Helena must assure: 1) that condition of and quantity of big game security results in the majority of public land elk on any landscape will remain on public land during the hunting season, or until winter conditions force them to lower lands, and 2) the age distribution of male elk meets the goals of FWP following the hunting season.		
		ORV and other motor travel regulations and commensurate law enforcement must result in complete public user compliance – assured through enforcement. If full public		
		compliance cannot be assured, then public non-compliance must be a measured metric that can be assessed in the realistic effectiveness of any new big game security standard, and then adaptive management measures applied.		Appendix F describes the intended benefits associated with Alternative B.
		Any Big Game Security Standard must include criteria and procedures to restore at least 30% of an EMU in security as soon as possible where herd unit habitat is currently deficient in security, rather than accept the status quo as the new minimum as currently proposed.		
292	Big Game	This letter from the Western Environmental Law Center was submitted on		Appendix F includes

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4/22/13 Bishop WEC	Security Amendment	behalf of HHA, CUTF, BHA and MBHA and has similar content to letter 291. Individual comments are shown below.		consideration of these comments as reflected in the Forest Service Responses to Public Comment Statements (PCS) 335-367. However, in order to demonstrate that these comments have been addressed, we have listed the individual comments associated with this letter and respective response.
		the new standard will weaken protections for big game, result in the loss of hiding cover and increased road-density in big game habitat, increase big game vulnerability, and ultimately decrease hunter opportunity in the Helena National Forest. There is a direct relationship between big game security habitat and elk, in particular, elk moving to adjacent private lands where they are difficult to manage and are generally unavailable to the public lands hunter.  The new standard, as proposed:  • exempts all private lands within an EHU from the 30% security threshold, i.e., private and state lands within the EHU – including lands that currently provide no cover – would not be factored into the 30% equation. This approach is inconsistent with the Hillis model and would allow security within an EHU to dip far below the recommended 30% threshold;  • eliminates the Helena National Forest's existing hiding cover standards for big game habitat (as defined by both the Service and Montana Fish, Wildlife and Parks). Maintaining adequate hiding cover is critical to providing secure areas for big game species and yet the new standard would eliminate any criteria for cover;		Appendix F includes a second alternative with regards to amending the Forest Plan Standard 4(a). That new alternative uses a 9/1 closure to define security, includes private land within the administrative boundary, and is consistent with Hillis et al. (1991) in terms of utilizing local knowledge and local conditions to determine site-specific security.  The Big Game Amendment Alternative B applies only to Forest Plan Standard 4(a); all other hiding cover standards will remain in place.
		<ul> <li>proposes a security standard that is only applicable to the general big game season, ignoring the displacement of big game onto private lands by bow hunters during the archery season;</li> <li>eliminates the Helena National Forest's maximum road density standards in big game habitat. In the absence of specific, numeric road-density</li> </ul>		See above.

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		standards for EHUs within the analysis area there will likely be in increase in acceptable road-density; and • relies on the Hillis method which is untested on east-side forests like the Helena National Forest that have more open forest cover types, high road-densities, and gentle topography.		Security as described in Appendix F (and Hillis and others) is based on open motorized routes. Because Alternative B would fix elk security depending on the travel plan alternative selected, there is by default a numeric road density.
	Non- compliance with NFMA – best available scientific information is not being used	The Service's planning regulations direct the responsible official to "use the best available scientific information to inform the planning process." 36 C.F.R. § 219.3. The Service is to determine "what information is the most accurate, reliable, and relevant to the issues being considered" and document how the "best available scientific information was used to inform the plan decision" Id. In this case, the Service is not using (or documenting how it is using) the best available science.  The existing Forest Plan Standard #4a includes standards for hiding cover and road-density in big game habitat and was based on extensive peer review and published science, including Lyon et al. (1985), Basile and Lonner (1979), Burbridge and Neff (1976), and Coggins (1976). For this reason, the Standard was incorporated into a number of Region One Forest Plans and has served as the applicable standard for the Helena National Forest for nearly 30 years. It is also why the Service is choosing to keep Standard #4a in place outside the analysis area and on the Helena National Forest, including in the Elkhorn Mountains.  The Service's proposed amendment would replace Standard #4a with an untested and modified version of the "Hillis method" (Hillis et al. (1991)).  The Hillis method was developed to help retain elk security areas west of the Continental Divide in Montana (no attempt was made to consider eastside conditions) and includes three criteria that represent the minimum requirements (they may need to be increased in areas with less topographic relief.		Specifically, Appendix F addresses the fact that the Hillis Paradigm was crafted in 1991: "The underpinnings of this methodology— i.e., elk tend to avoid open, motorized routes during the hunting season—has been reinforced through the work of Unsworth and others (1991, 1993), Rowland and others (2000, 2005), and Proffitt and others (2011), to name just a few."  Appendix F includes a discussion on the basis for the existing Forest Plan Standard 4(a) in the section "Relationship of Forest Plan Big Game Standard 4(a) and Elk Management".

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		Hillis method (size and shape of cover blocks, distance from open roads and thresholds within an EHU that must provide security) and applies it to the Helena National Forest but without discussing, incorporating or otherwise explaining the caveats for applying the criteria to east-side forests like the Helena (that include less cover and more open terrain). Nor is there any information suggesting that the Service engaged in a formal review with local biologists and researchers familiar with conditions and harvest situations before applying the Hillis method's criteria. The Service must, therefore, explain why the Hillis method – as applied – is a good fit for this analysis area and a better fit than Standard #4a. The Service must also explain how the caveats included in the Hillis method were accounted for when choosing the proposed standard.		Appendix F and the crafting of Big Game Amendment Alternative B are consistent with Hillis' recommendation that "strict adherence to the guidelines should be avoided".
		There are approximately 2,000 miles of roads on the Helena National Forest according to the 2004 Roads Analysis. These are not "favorable conditions" that would justify using the 250 acre minimum. No allowance or explanation of these differences, however, is provided by the Service. Nor does the Service describe what the ideal security percentage, block size, and distance from roads should be in the Helena National Forest, in the analysis area, or the specific EHUs. At the very least, the Service must (but has failed) to conduct an analysis of forest cover, terrain, and road-density to determine whether the Hillis method could approach functionality for big game security on the Helena National Forest. See e.g., Jellison (1998)(application of Hillis model to Bighorn National Forest in Wyoming).		The Alternative B discussion in Appendix F includes consideration of patch size, distance from open roads, and thresholds within an elk herd unit. It also includes reference to the collaboration with MFWP on the amendment language.
		The Hillis method also notes that the shape of the security area is important (the least amount of edge and greater width the better). The Service's proposed amendment fails to take this into account. The Service's proposed amendment also does not account for "closed roads" that may penetrate security areas or the location of open roads which plays a large role in defining whether cover patches will provide security.		
		The Service must also explain how it defines "security areas" in the absence a hiding cover standard. As proposed, an area would be deemed "secure" based solely on the area's distance from an open road and regardless of the amount (or lack of) forest cover. Please provide the scientific support for this approach. Both Hillis et al. (1991) and Christensen et al. (1993) require		The Big Game Amendment Alternative B is based on a definition of security where patch sizes are greater than or

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		cover in elk security areas. Hillis et al. (1991) does not expressly include a standard for hiding cover but the paper does discuss the importance of cover (as do other papers) and does recognize that security areas may consist of a variety of cover types. Notably, in a April 12, 2013, letter to Greg Munther of Montana Backcountry Hunters and Anglers regarding the Service's proposed amendment (the letter is being provided with Mr. Munther's comments) Hillis and Jack Lyon describe the 250 acre block size requirement as a "hiding cover" variable. Clearly, the amount of available hiding cover in security areas – and how it will be managed – is an important factor that must be considered and explained by the Service.		equal to 1000 acres greater than or equal to ½ mile from an open motorized route.
		In addition, the Service's proposed amendment makes one significant (though not obvious) change to the criteria of the Hillis method: it excludes private lands within the EHU from the 30% threshold. No explanation is provided for this significant change which would allow security areas to fall well below the 30% threshold when private lands are not taken into account. See Native Ecosystems Council v. Weldon, 848 F. Supp. 2d 1207, 1217 (D. Mont. 2012).		The Big Game Amendment Alternative states that "security blocks do not include constrictions less than or equal to ½ mile in width".
		If, for instance, the EHU consisted of 30% forest cover but most or all of that cover occurred on National Forest lands (a very real possibility), the Service's proposed amendment would allow the removal of 2/3 of the existing forest cover on National Forest lands up to the 30% threshold. But, across the entire EHU (which includes private lands), the loss of additional cover on National Forest lands could bring the amount of security down to 11% over the EHU – well below the Hillis method's recommendations. The Service must explain why this change was made to the best available science and what it means in terms of elk security. See Weldon, 848 F. Supp.2d at 1217.  In sum, even if one assumes, arguendo, that the Hillis method is the best available science for managing big game habitat on east-side forests like the Helena National Forest (which the Service failed to explain or otherwise document in the DEIS), the Service is not applying the Hillis method as directed by the author. As such, the proposed amendment is not the best science. It is untested science.		The discussion in Appendix F for Alternative B includes consideration of Hillis et al. (1991) – "Although Hillis et al. (1991) define security as "nonlinear blocks of hiding cover", they also suggest that effective security areas may consist of several different cover –types if the block is relatively unfragmented" and Christensen et al (1993) - "They recommend that in the more

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				central Montana cover considerations should extend beyond the hunting season and therefore be assessed at a landscape level (See also Edge et al. 1987). Their data suggest that 'elk are less selective about the specific vegetative characteristics of coniferous cover and more responsive to the size of units, connectiveness with adjacent units, and the scale of cover on the landscape"  Security as defined in Alternative B includes consideration of private land within the elk herd unit portion that is within the administrative boundary.
	Amendment needs to be consistent with other Forest Plan Standards	Pursuant to the National Forest Management Act ("NFMA"), the Service must ensure that the proposed amendment (as well as the proposed Blackfoot Travel Plan) is consistent with the Helena Forest Plan. See 16 U.S.C. § 1604 (i). If not, then the responsible official must either change the proposed amendment to bring into compliance with the other standards in the Forest Plan or amend to the other Forest Plan standards.  Here, the Service has failed to ensure the proposed amendment - which replaces the existing hiding cover and road-density standards in big game habitat with an untested and modified version of the Hillis method – is consistent with the following existing standards in the Helena Forest Plan:  • Big game Standard #1 requiring that important summer and winter range for big game species include adequate hiding and thermal cover to support habitat potential. The Service must (but has failed) to explain how the		Appendix F includes a section "Compatibility of Forest Plan Amendment Alternative B-Preferred Alternative with Existing Wildlife Standards".

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		proposed amendment – which does away with the hiding cover standard – will ensure compliance with this important standard;		
		Big game Standard #2 requiring that an environmental analysis for all project work include a cover analysis at the drainage or EHU level;		
		• Big game Standard #3 directing that elk summer range be maintained at 35% or greater hiding cover and areas of winter range maintained at 25% or greater thermal cover in drainages or EHUs. This standard incorporates all land (private, state, and federal) in the EHU;		
		<ul> <li>Big game Standard #4 directing the Service to implement an aggressive road management program to maintain or improve big game security. The Service must explain how the proposed amendment – which removes standards for maximum road density in the EHUs, exempts private and state lands from the big game standards, ignores the caveats in the Hillis model, and allows for the reduction in elk security to the 30% threshold – qualifies as an "aggressive" program to maintain and improve big game security;</li> <li>Big game Standard #4b stating that elk calving grounds and nursey areas will be closed to motorized vehicles during peak use by elk;</li> </ul>		
		• Big game Standard #4c directing that all winter range areas be closed to vehicles between December 1 and May 15;		
		Big game Standard #5 dictating the minimum size areas for hiding and thermal cover;		
		• Big game Standard #6 stating that the Service will follow the Montana Cooperative Elk-Logging Study Recommendations (Appendix C in the Forest Plan);		
		• Big game Standard #10 stating that moose habitat will be managed to provide adequate browse species diversity and quantity to support current moose populations. Notably, Standard #4a is a big game standard designed to protect habitat for elk, deer, and moose. Mule deer and moose numbers are in decline in western Montana and eliminating standards for habitat cover may make a bad situation worse for these big game species;		
		• The standards, guidelines, and objectives included in the Northern Rockies Lynx Management Direction ("NRLMD");		
		• The grizzly bear standards included in the Helena Forest Plan, including but not limited to the requirement, in occupied grizzly habitat, to minimize man-caused mortality by limiting the open road density to the 1980 density of 0.55 miles per square mile and the IGBC's open road, total road, and core		

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		area standards for grizzly bear habitat;  • All standards and monitoring requirements of MIS, including but not limited to all forest (mature, old growth, snag) dependent species and sensitive, threatened and endangered species.  Review of Appendix F reveals the Service's "analysis" for the proposed amendment in the DEIS neglects to include a consistency review with existing Forest Plan standards. Moreover, on its face, the proposed amendment's exemption of private land from the application of the new standard conflicts with the Helena Forest Plan's other big game standards (listed above), all of which use the entire EHU (including private lands) as the unit of analysis. See Helena Hunters & Anglers v. Tidwell, 841 F. Supp. 2d 1129 (D. Mont. 2009); Weldon, 848 F. Supp. 2d at 1218; Native Ecosystems Council v. USFS, 418 F. 3d 953, 962-63 (9th Cir. 2005).		
	The amendment needs to maintain viable populations of big game species	Under NFMA, the implementing regulations, and the Helena Forest Plan, the Service is required to manage wildlife habitat on the Helena National Forest to ensure viable populations of existing native species are maintained.  To do so, the Service identified management indicator species ("MIS") for various species groups within the Helena National Forest whose habitat is most likely to be changed by forest management activities. The MIS for the mature tree dependent group, for instance, is the marten. The old growth dependent group is represented by the piliated woodpecker and the goshawks; the snag dependent groups is represented by the hairy woodpecker; the threatened and endangered group includes the grizzly bear (and other species); and the commonly hunted MIS are elk, mule deer, and bighorn sheep.  These MIS represent a proxy or surrogate for the health and viability of many other species. While the Service retains some flexibility with respect to the appropriate methodology used to monitor population numbers (actual and trend) of MIS, i.e, using population data on MIS and/or habitat data as a proxy for MIS population data (commonly referred to as the "proxy-on-proxy" approach) the mandate to maintain viable populations of MIS like elk, mule deer, marten, grizzlies and woodpeckers, cannot be ignored. And the methodology employed must be reasonably reliable and accurate. See Native Ecosystems Council v. Tidwell, 599 F. 3d 926, 933 (9th Cir. 2010). If, for example, the Service decides to use habitat as a proxy for population		As described in the Big Game security amendment and the FEIS, FP Standard 4a was developed with MTFWP to determine which roads, trails, and areas should be restricted and opened to complement methods MTFWP was using at the time to monitor bull harvest. Since MTFWP no longer use this methodology to monitor bull harvest the big game security amendment was developed in conjunction with MTFWP to provide a more relevant means of providing elk security during the hunting season. Adherence to FP standards such as 4a or the elk security amendment are used in conjunction with various other factors such as MTFWP annual herd counts to

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		numbers for MIS, then the proxy results must mirror reality. Maintaining the acreage of habitat necessary to maintain viable populations of big game species (elk, deer, and moose) on the Helena National Forest must in fact ensure viable populations are maintained. At the very least, the Service must describe the quantity and quality of habitat that is necessary to sustain the viability of big game species and explain its methodology for measuring this habitat. See Native Ecosystems Council v. Weldon, 848 F. Supp.2d 1207, 1213 (D. Mont. 2012).		assess species viability.  Appendix F includes a consideration of elk viability.
		In the Helena National Forest, the Service uses the big game standards, including Standard #4a, as a means of ensuring compliance with NFMA's viability requirement. Compliance with Standard #4a's hiding cover and road-density standard, for instance, is used as a proxy for population numbers of elk and, as such, other big game species. The proposed amendment, however, eliminates Standard #4a and replaces it with an untested, modified version of the Hillis method. Because it is untested and eliminates the standard for hiding cover and road-density, there are no assurances that the new standard will work. There are no assurances, let alone reasonable assurances, that the new standard is reliable and accurate and will ensure viable populations of elk and other big game species will be maintained. See Weldon, 848 F. Supp.2d at1214-1215. Use of the new standard as a proxy for monitoring populations (actual and trend) of MIS like elk and deer, therefore, is a violation of NFMA, the implementing regulations, and the Forest Plan.		
	Non- compliance with NEPA	NEPA "promotes its sweeping commitment to 'prevent or eliminate damage to the environment' by focusing Government and public attention on the environmental effects of proposed agency action." Marsh v. ONRC, 490 U.S. 360, 371 (1989). By so doing "NEPA ensures that the agency will not act on incomplete information, only to regret its decision after it is too late to correct." Id. Similarly, the "broad dissemination of information mandated by NEPA permits [the] public and other government agencies to react to the effects of a proposed action at a meaningful time." Id. "Ultimately, of course, it is not better documents but better decisions that count. NEPA's purpose is not to generate paperwork — even excellent paperwork — but to foster excellent action." 40 C.F.R. § 1500.1(c).  As outlined below, the Service's decision to replace Standard #4a with a new standard — which will result in the loss of hiding cover, increased roaddensity, and will allow the reduction of big game security to fall below the		NEPA compliance is documented in the FEIS and NEPA compliance has been met through this project. A programmatic Forest Plan amendment for the Blackfoot planning area is needed to more closely align current science, local conditions, and other information with species needs that meet the intent of the Forest Plan.

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		Hillis method's 30% thresholds (by exempting private lands) – is not in compliance with NEPA in a number of significant respects.		
	The Service does not provide enough information, including the necessary criteria to be used when applying the Hillis model, in order to make informed comments.	The goal of NEPA, and the very purpose of preparing a document like a DEIS is to "provide a full and fair discussion of significant environmental impacts [of a proposed action]" and to "inform decision makers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment." 40 C.F.R. § 1502.1. All agencies, including the Service "shall insure the professional integrity, including scientific integrity, of the discussions and analyses in [NEPA documents.]" 40 C.F.R. § 1502.24. In this case, the Service neglects to provide the necessary information needed in order to submit meaningful and informed comments on the proposed amendment. Indeed, the proposed amendment is tucked into Appendix F in the back of the DEIS. It is not woven into the DEIS's environmental analysis or alternatives discussion. And very little to no supporting information is provided about the new standard and its potential impact on big game numbers and habitat.  The Service states that it will replace the existing Standard #4a with the Hillis method. But the Service does not describe or explain the caveats included in the method – all of which are applicable to the Helena National Forest. Nor does the Service openly and clearly explain the changes it made to the Hillis method's criteria (i.e., by exempting private land). This is a violation of NEPA. See Weldon, 848 F. Supp. at 1217.  The Service also states that the proposed amendment was derived from the Hillis method and "adopts specific guidelines for its application from Recommendations for Big Game Habitat Management" from other forests but these specific guidelines are not described, referenced, and provided in the DEIS. If the proposed amendment is based on these specific guidelines then more information on them (and access to them) must be provided. Likewise, the Service neglected to provide any maps (or any links to any maps) that depict the proposed amendment, including the number and location of security areas		A proposed amendment was put forth in the DEIS (Appendix F) to replace the existing Helena National Forest Big Game Standard 4(a). We received several comments on the proposed amendment (See Public Involvement, Issues, and Concerns below). After extensive review of the comments and in depth discussions with the Montana Department of Fish, Wildlife, and Parks (MFWP), a new amendment alternative was developed for this FEIS. This new amendment alternative along with the existing Forest Plan Big Game Standard 4(a) serves as those amendment alternatives brought forward for further consideration in the FEIS. We dismissed the proposed amendment presented in the DEIS from further consideration as it did not reflect MFWP and public comments. We included consideration of Big Game Standard 4(a) as an alternative brought forward, again, due to public input. We also included a management goal for big game security.

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		amendment. Because the proposed amendment will impact big game habitat, at the very least, the Service must describe the quantity and quality of habitat that is necessary to sustain the viability of big game species and explain its methodology for measuring this habitat. See Weldon, 848 F. Supp. at 1213. This information is lacking.		
				The Alternative B discussion in Appendix F includes consideration of patch size, distance from open roads, and thresholds within an elk herd unit. It also includes reference to the collaboration with MFWP on the amendment language.  Appendix F includes maps of the security areas associated with Alternative B.
				Appendix F identifies the amount of hiding cover by herd unit which is the unit of measure for Forest Plan Standard 4(a).
	Best available science	Pursuant to NEPA, information included in NEPA documents "must be of high quality" and "accurate scientific analysis [is] essential to implementing NEPA." 40 C.F.R. § 1500.1(b). While a DEIS may not be expected to reference or rely on every study or opinion, the state of scientific knowledge on a particular subject must be fairly represented in a balanced manner. Morever, a DEIS must contain a reasoned analysis in response to conflicting data or opinions on environmental issues. As discussed above, the Service's decision to replace Standard #4a with an untested, modified version of the Hillis method is not based on the best available science regarding big game management. See supra Section A.1.		Appendix F discloses the science utilized in the development and effects of Alternative B: "The underpinnings of this methodology— i.e., elk tend to avoid open, motorized routes during the hunting season— has been reinforced through the work of Unsworth and

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				others (1991, 1993), Rowland and others (2000, 2005), and Proffitt and others (2011), to name just a few."
	The Service must articulate the "purpose and need" of the proposed amendment.	Pursuant to NEPA, the Service must (but has failed) to "specify the underlying purpose and need" of the proposed action. 40 C.F.R. § 1502.13. Doing so is important because it dictates the range of alternatives that must be considered and evaluated by the Service. Nowhere in the DEIS or Appendix F, however, does the Service clearly articulate what - precisely - is the purpose and need of the proposed amendment.  As the Service concedes, elk numbers "have been steadily increasing" since the existing Standard #4a was adopted. So, decline in elk numbers and a need to shift management strategies to improve big game management is not the motivation. The Service mentions that Standard #4a is 27 years old and does not reflect the "relevant science" but the Hillis method upon which it now relies was developed in 1991 – 22 years ago – and only 5 years after Standard #4a. And, as mentioned above, the Hillis method was developed for west-side forest conditions. It is untested on the Helena National Forest. Review of Appendix F reveals the proposed amendment is more about giving the Service more flexibility and latitude in forest management and travel planning than proper management of big game habitat.		Appendix F includes a detailed description of the purpose and need.
	The Service must adequately analyze the direct effects of the proposed amendment.	Pursuant to NEPA, the Service is required to assess how the proposed amendment may directly impact the environment. Direct impacts are caused by the action and occur at the same time and place. See 40 C.F.R. §1508.8. The direct impacts of an action must be analyzed based on the affected interests, the affected region, and the locality in which they will occur. 40 C.F.R. § 1508.27 (a).  Here, the Service failed to take a hard look at the direct impacts of the proposed amendment which—by eliminating the hiding cover and road density standards and exempting private land from the 30% security threshold—will result in less hiding cover on National Forest lands in the EHU (and more timber harvest), increased road-densities, and potentially less security in big game habitat. Nowhere in the DEIS, however, does the Service analyze what the direct impacts of these changes will be on big game numbers and habitat (elk, deer, and moose) or on other MIS, sensitive, and listed species (lynx and grizzlies) inhabiting the area. Most of		The effects of implementing Big Game Amendment Alternative B are described in Chapter 3, FEIS.

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		these species depend on (and need) dense forests with high levels of horizontal cover, secure areas, and less roads for long-term survival and recovery.  In Appendix F to the DEIS, the Service concludes that loss of hiding cover (and eliminating the standard) will have no negative effect on big game security but no analysis is provided. And, the assumption that cover is not important for big game species like elk, deer, and moose is belied by the best available science, including Hillis (1991). The loss of hiding cover from timber harvests has the potential to "severely impact remaining security and, ultimately, hunter opportunity." Hillis (1991) at 42; see also Jellison (1998) (hunter opportunity down on the Bighorn National Forest due to "accelerated timber harvesting [that] sent former elk hiding cover to the sawmills and logging roads permeating previously secluded areas."); Christensen et al. (1993) ("As you move east into Montana and over the Continental Divide, cover considerations become more important because cover is less abundant and less contiguous it will be important to develop long-term perspectives (rotation length) on cover management that address condition, quantity, location, and configuration.").  Notably, the proposed amendment is only described in Appendix F of the DEIS - it is not incorporated into the affected environment or environmental consequences section of the DEIS. This is a major oversight. The Service must take a hard look at how the proposed amendment will impact the environment, including but not limited to, soil quality and productivity, water quality (sediment from existing routes in the analysis area is currently a problem), wetlands, integrity and use of the area as a corridor or "linkage zone" for wildlife, and habitat and population numbers for threatened and endangered species (including lynx and grizzlies), sensitive species (wolverine - currently proposed for listing), and various MIS on the forest, including forest-dependent species. The Service must also		Appendix F includes a section "Compatibility of Forest Plan Amendment Alternative B-Preferred Alternative with Existing Wildlife Standards".
	The Service must adequately analyze the indirect effects	The DEIS fails to identify and take a hard look at the "indirect effects" that may result from the proposed amendment. Indirect effects of a proposed action are effects that are caused by the action but occur later in time or are further removed in distance. 40 C.F.R. § 1508(b). Indirect effects "may include growth inducing effects or other effects related to induced changes in		The effects of implementing Big Game Amendment Alternative B are described in Chapter 3, FEIS.

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	of the proposed amendment.	pattern of land use; population density or growth rate; and related effects on air, water, and other natural resources." Id.  Here, the proposed amendment will likely result less hiding cover of National Forest lands. This may push elk off of public lands and onto private lands (assuming adequate security is provided on those lands). And the loss of hiding cover, most likely from timber projects, will come with additional logging roads and skid trails thereby providing even more access into secure areas. In addition, eliminating Standard #4a's road density standards paves the way for more roads and motorized trails on National Forest lands which, in turn, means more public access to remote areas. These roads – which make it easier and faster for walking, biking, and horseback riding – will funnel more hunters, trappers, and recreationists into otherwise secure habitat. No analysis of these and other indirect effects are provided in the DEIS.		
	The Service must adequately analyze the cumulative effects of the proposed amendment.	The DEIS fails to analyze the cumulative effects of the proposed amendment. Cumulative impacts are "the impacts on the environment which result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions." 40 C.F.R. § 1508.7. Cumulative impacts can result from "individually minor but collectively significant actions taking place over a period of time." Id. The proper consideration of cumulative impacts under NEPA requires "some quantified or detailed information; general statements about possible effects and some risk do not constitute a hard look absent a justification regarding why more definitive information could not be provided." Great Basin Mine Watch v. Hankins, 456 F. 3d 955, 971 (9th Cir. 2006). Moreover, the "analysis must be more than perfunctory; it must provide a useful analysis of the cumulative impacts of past, present, and future projects." Id. The Service "must do more than just catalogue relevant past projects in the area." Id. It must give a "sufficiently detailed catalogue of past, present, and future projects and provide adequate analysis about how these projects, and the difference between the projects, are thought to have impacted the environment." Id. Some "quantified assessment of their combined environmental impact" is required. Id. at 972.  In this case, the Service neglected to identify or properly consider and analyze how eliminating Standard #4a and replacing it with the proposed amendment may cumulatively impact all big game species (not just elk but		With respect to cumulative impacts to other resource areas the Big Game Amendment is simply a reflection of open road densities and distribution during the big game hunting season. Therefore, the cumulative effects of other resources addresses the travel plan incorporate the cumulative effects of the amendment.  Appendix F includes an analysis of the impacts of past and reasonably foreseeable amendments relative to the proposed Big Game Amendment Alternative B.

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		deer and moose as well), other forest dependent species (including MIS, sensitive, and listed species like lynx), grizzlies and grizzly bear security, water quality, soils, and wildlife connectivity. At present, there are a number of Federal, State, and private actions that have occurred, are occurring, or are reasonably certain to occur in the Helena National Forest, the EHUs, and the proposed analysis area that may be having a cumulative impact and must be analyzed by the Service in conjunction with the proposed amendment. These include, but are not limited to: forest management on public lands (thinning, salvage, regeneration harvests, hazardous tree removal, pre-commercial thins) and associated roads, skid trails, and disturbance; private land development and forest management; motorized recreation and travel planning; beetle-kill, climate change, livestock grazing, highways, hunting, and superfund cleanup/storage.		
	Failure to evaluate a reasonable range of alternatives to the proposed amendment.	NEPA "mandates that agencies 'study, develop, and describe appropriate alternatives to recommended course of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources." Pit River Tribe v. U.S. Forest Service, 469 F. 3d 768, 785 (9th Cir. 2006) (quoting 42 U.S.C. § 4332 (E)); see also 42 U.S.C. § 4332 (2)(C)(iii) (must consider "alternatives to the proposed action").  The alternatives analysis is "the heart" of the environmental analysis because it presents "impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options." 40 C.F.R. § 1502.14. The alternatives analysis guarantees that "agency decision makers '[have] before [them] and take [] into proper account all possible approaches to a particular project (including total abandonment of the project) which would alter the environmental impact and the cost-benefit balance." Bob Marshall Alliance v. Hodel, 852 F. 2d 1223,1228 (9th Cir. 1988) (citations omitted). "Informed and meaningful consideration of alternatives is thus an integral part of the statutory scheme" and "critical to the goals" of NEPA. Id. at 1228-29.  15  In this case, the Service fails to adequate describe, let alone consider and analyze a reasonable range of alternatives to the proposed amendment. No alternatives to the Service's proposed amendment are mentioned in the DEIS or Appendix F. This is a blatant violation of NEPA. The Service does mention three alternatives in Appendix F – Alternative 1 (no action), Alternative 2 (proposed action), and an Alternative 3 – but these three		The existing Forest Plan Standard 4(a) is included as an alternative in Appendix F. Appendix F includes two alternatives carried forward and several not considered in detail. All of the Travel Plan Action Alternatives reduce open road densities.

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		alternatives are for the Blackfoot Travel Plan, an entirely separate decision. As such, the Service must (but has failed) to analyze a reasonable range of alternatives to the proposed amendment.		
		At the very least, this would include a no action alternative (keep Standard #4a) and evaluating and comparing a wide range of new standards/approaches for managing big game habitat in the Helena National Forest based on the best available science. Such alternatives might include: (1) applying the Hillis model as described in Hillis et al. (1991) without any changes; (2) increasing block sizes, threshold values, and/or distances from roads or making other modifications to the Hillis method's criteria to account for difference between the eastside and westside forests; (3) the Service's current proposed action (i.e., apply the Hillis method with an exemption for private land and eliminating inclusion of forest cover); (4) keeping parts of Standard #4a and combining it with other approaches, including the Hillis method; or (5) develop an entirely new approach based on current habitat conditions and harvest numbers for the analysis area and after consulting local researchers and biologists.		
		we respectfully ask that the Service retain, and take aggressive steps to comply with, the existing Forest Plan Standard #4a until such time as the Service: (1) fully analyzes the environmental consequences of, and reasonable alternatives to, the proposed amendment; (2) ensures any such changes are consistent with existing Forest Plan standards; and (3) takes a hard look at the best available science on maintaining and improving big game numbers and habitat on east-side forests like the Helena National Forest.		The rationale and analysis for developing Big Game Amendment Alternative B to replace the existing Forest Plan Standard 4(a) is provided in Appendix F.
293 4/22/13 Frasier HHA, CUCTF	Big Game Security Amendment	Identical to letter #291 (from Gunther et al.) but with 2 additional attachments:  October 2009 Comment Letter from Stan Frasier, Helena Hunters and Anglers Association addressed to Liz Van Genderen, Helena National Forest regarding the Proposed Forest Plan Amendment –Forest-Wide Hazardous Tree Removal		This comment letter regarding the Forest-wide Hazardous Tree Removal was not included in this analysis.
		Abstract of: Newell, J. and Q. Kujala. 2013. Status of Deer and Elk in Montana, 1960-2011. 10th Biennial Western States & Provinces Deer & Elk Workshop May 6-9, 2013. Missoula MT.		Newell and Kujala (2013) are cited in Appendix F

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		<ul> <li>The following 3 references are listed as attachments but no electronic versions of these attachments were retrievable from the PDF of the letter:</li> <li>Thompson, M. J., G. R. Baty, and C. L. Marcum. 2005. Elk use of forage and cover in response to wildfire and severe snow conditions. Abstracts of the 2005 Annual Meeting of the Montana. Chapter of The Wildlife Society, In: Intermountain Journal of Sciences, Vol. 11, No. 3-4.</li> <li>Jellison, B.A., 1998. Rocky Mountain Elk vulnerability within the Bighorn National Forest. Rocky Mountain Elk Foundation (WY96107), Bow Hunters of Wyoming and Wyoming Game and Fish Department.</li> <li>Proffitt, K.M., J.A. Gude, K.L. Hamlin, M.A. Messer. 2013. Effects of Hunter Access and Habitat Security on Elk Habitat Selection in Landscapes With a Public and Private Land Matrix. Journal of Wildlife Management 77(3):514–524; 2013; DOI: 10.1002/jwmg.</li> <li>The portions of the letter that were identical to letter #291 were not repeated here – see above response to all comments associated with letter #291</li> </ul>		Thompson et al was not used in this analysis  Jellison (1998) is cited in Appendix F  Profitt et al (2013) cited in Appendix F
FORM 5 4/24/13 Koch	Big Game Security Amendment	Same as letter 288-FORM 5		
FORM 5 4/24/13 Molynea ux	Big Game Security Amendment	Same as letter 288-FORM 5		
<b>294</b> 4/24/13 Hackatho	existing big game security standard	Loss of big game security on public lands translates to a loss of big game hunting opportunity for the average Montana hunter.	PCS 357	Appendix F provides a discussion of the relationship of security to hunting opportunity.

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rn Hellgate Hunters and Anglers	Best available science	We are deeply concerned that the proposed Big Game Security Amendment (Big Game Standard 4a) for the Lincoln Ranger District is not based on the best available science and that it is being issued at the same time as the travel plan for the District	PCS 357, 362	Appendix F discloses the science utilized in the development and effects of Alternative B: "The underpinnings of this methodology— i.e., elk tend to avoid open, motorized routes during the hunting season— has been reinforced through the work of Unsworth and others (1991, 1993), Rowland and others (2000, 2005), and Proffitt and others (2011), to name just a few."
	Seasonal restriction of September 1 – December 1 to maintain elk security	travel restrictions for big game security should be maintained throughout the hunting seasons—from September 1 to December 1—rather than just during the big game general hunting season, as is now proposed.	PCS 159	Alternative B bases elk security on 9/1 road closures.
	Size and shape of security areas	A big game security standard that was based on Alternative 3 would have much larger patch sizes (potentially from 1,400 to 5,000 acres) rather than the 250 acres proposed in the proposed big game security amendment. The standard should include language to prevent a long, linear patch from counting as security.	PCS 355	The Big Game Amendment Alternative states that "security blocks do not include constrictions less than or equal to ½ mile in width".
	Select alternative 3, use best science, initiate new NEPA analysis	In summary, we ask the Helena National Forest to retain the existing elk security standard and adopt Alternative 3 in the travel management plan to assure that elk have the security they need during the hunting seasons on national forest lands. Any future change to the existing elk security standard should be based on the best available science, be peer reviewed, and subject to a new round of public comment and National Environmental Policy Act analysis.	PCS 290, 366, 362, 367, 373. 378	Appendix F includes the existing Forest Plan Standard 4(a) as an alternative carried forward.
FORM 5 4/24/13	Big Game Security	Same as letter 288-FORM 5		

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Koch	Amendment			
FORM 5 4/24/13 Forkan	Big Game Security Amendment	Same as letter 288-FORM 5		
FORM 5 4/24/13 Peterson	Big Game Security Amendment	Same as letter 288-FORM 5		
FORM 5 4/24/13 Lilletvedt	Big Game Security Amendment	Same as letter 288-FORM 5		
FORM 5 4/24/13 Partin	Big Game Security Amendment	Same as letter 288-FORM 5		
295 4/24/13 MFWP	Big Game Security Amendment	Although elk populations have generally increased in hunting districts that include Helena National Forest land since adoption of the 1986 HNF Forest Plan, the number of elk that spend summer and fall on the Lincoln Ranger District (LRD) have not. No hunting district within the Blackfoot Travel Plan area is currently above the FWP-adopted population objective (MFWP 2005). Bull survival is low relative to FWP objectives in 3 of the 4 elk hunting districts that include the Lincoln Ranger District; the one exception being hunting district (HD) 339 where special regulations specifically limit bull harvest opportunity. FWP recommends that land managers provide enough secure habitat during fall to meet annual bull survival objectives while maintaining general bull harvest opportunity. The current status of each affected hunting district is presented at the end of this letter.		Appendix F includes consideration of these comments as reflected in the Forest Service Responses to Public Comment Statements (PCS) 335-367. However, in order to demonstrate that these comments have been addressed, we have listed the individual comments associated with this letter and respective response.  Big Game Amendment Alternative B was developed in collaboration with MFWP.
		Neither public land populations nor bull ratios in the Lincoln valley have increased despite the near elimination of antlerless harvest opportunity and the adoption of spike-bull harvest restrictions. In contrast, the number of elk that spend the majority of the year on some nearby private lands has increased dramatically between 1986 and 2013. FWP has consistently urged		Similar to Alt 3 the Selected Alternative would provide a substantial improvement in elk security during the fall months.

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		the HNF to increase functional fall habitat security on the Lincoln Ranger District during the more than 5 years we have participated in the non-winter Travel Plan amendment process. Alternative 3 in the Blackfoot Non-winter Travel Plan DEIS (hereafter, Alternative 3) fairly represents FWP's recommendations. Adoption of this Travel PlanAlternative, as proposed, will both increase bull survival and reduce the displacement of elk from public to private land.		
		We agree that the current HNF Big Game Security Standard 4(a) does not effectively measure changes to those conditions that directly contribute to elk habitat security. We also agree that effective hiding cover is prevalent, well distributed, and recruited relatively quickly following disturbance on the LRD, especially west of the Continental Divide. However, it is difficult to completely and accurately measure cover at a landscape scale.  FWP generally supports the Forest Service's proposal to amend Standard 4(a) to instead use the "security area" concept ("Hillis Paradigm"; Hillis et al. 1991) as the basis for providing and monitoring effective big game security on the LRD. However, we disagree with how the framework was applied in the Proposed Forest Plan Amendment for Big Game Security (hereafter, the Amendment).		The Amendment reflects collaborative discussions and meetings with MFWP.
		Hillis et al. (1991) and subsequent researchers (summarized in Christensen et al. 1993, Proffitt et al. 2013), clearly demonstrated that motorized route density, location, and timing of use are the most important factors affecting public-land bull elk survival. Hillis and his coauthors recommended retaining large, nonlinear, strategically located, and well-distributed patches of non-motorized habitat during the fall hunting season as a way to both protect bulls and prevent displacement of elk from public lands.  We agree that this straightforward approach to an elk security provision can be effective in areas like the LRD where hiding/screening cover is generally available and relatively resilient following disturbance. However, we believe the current proposal selectively, and incorrectly, applies portions of the Hillis Paradigm as a basis for amending the Big Game Security Standard on the LRD. Across the LRD, elk habitat security is first and foremost a function of fall motorized-route density and location. A complete application of the Hillis Paradigm requires that managers specifically designate large and well-distributed security areas within elk analysis units. This is what the HNF,		The Amendment reflects collaborative discussions and meetings with MFWP.

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		FWP, and others worked to do during the development of Alternative 3. Ideally, a Big Game Security standard would simply ensure that the total amount, distribution, and minimum size of secure habitat patches resulting from the implementation of Alternative 3 are maintained over time.		
	Minimum patch size	The field research that led to the development of a minimum "security area" patch size recommendation (Hillis et al. 1991, Lyon and Canfield 1991) was conducted in the lower Clark Fork drainage of western MT. That study area's topography, forest composition, and public-private land matrix were significantly different than those on the LRD. The authors explain that in the Clark Fork, "conditions are favorable for elk to elude hunters: cover is dense, terrain is steep, and forest communities are largely unfragmented."  Although the authors recommended that, on their study area, secure patches be a minimum of 250 acres in size and comprise at least 30% of a herd unit's fall home range, they were clear that where forests are more sparse and where terrain is less formidable (as in the LRD), the size of security areas must be significantly larger in order to provide similar security to resident elk. The Forest Service itself acknowledged this need to provide larger security areas in more open and accessible forests (DEIS, p. 491). LRD forests are drier and have sparser understories than those in the lower Clark Fork; there are more natural openings and the topography is generally less severe.  Nevertheless, the HNF proposes only the minimum recommended security area patch size (250 acres) and percent retention (30% of an elk analysis unit) as the new standard for Big Game Security on the LRD in the DEIS. FWP does not believe this proposed standard is supported by either the literature or the HNF's own analysis. In order for security areas on the LRD to adequately protect bull elk, reduce displacement of elk to private land refuges during hunting season, and obviate the need to specifically quantify vegetative cover within herd units, individual security areas need to be much larger than those proposed in the Amendment.  On the LRD, FWP supports using a standard 0.5-mile buffer around roads, trails, and private land open to motorized travel during the fall season (9/1-12/1) as the basis for security area analysis. Bec		The Amendment reflects collaborative discussions and meetings with MFWP and incorporates these recommendations.
		security area is necessarily a function of distance to its insecure periphery, patches with constrictions <0.5 mile in width should be separated at that		

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		constriction and analyzed individually.  Preliminary analysis of the application of these criteria to each proposed Blackfoot Travel Plan Alternative indicates that implementing Alternative 3 would: I) significantly improve elk habitat security compared to the existing condition; 2) result in nearly all secure areas being larger than I,200 acresin fact most would exceed 5,000 acres; and 3) distribute security areas		
		among Elk Herd Units (EHU) and within the LRD.  Therefore, a security area patch size as defined above of at least I ,000 acres appears to be an appropriate minimum standard for security standard analyses on the LRD. This patch size represents a minimum effective patch size and this recommendation in no way justifies reducing patch sizes to meet this level (Hillisetal. 1991).		
	Security area design and distribution	The size of a security area is just one predictor of its effectiveness (Hillis et al. 1991, Christensen et al. 1993). Topography, open road locations, patch shape, and forest structure all help determine how large these areas need to be in order to provide similar benefits in different areas.  The Hillis Paradigm is most effective when managers can manipulate the density, specific location, and seasonal use of motorized routes "so results make biological sense in a local setting" (Hillis et al. 1991)-i.e., during Travel Plan development. Although FWP worked directly with HNF staff for over 5 years to help develop, and ultimately recommend, Alternative 3 of the Blackfoot Travel Plan, we were unaware of the proposal to also amend Standard 4(a) ofthe Helena Forest Plan until the DEIS was released.  FWP consistently applied the principles of the Hillis Paradigm as it considered the need for increased elk security during Blackfoot Travel Plan development. Like the Forest Service (DEIS p. 495), we believe "Alternative 3 would result in a substantial improvement in security habitat for most of the EHUs." FWP supports travel management that increases elk security on the LRDAlternative 3 represents FWP's specific recommendation regarding how that improvement should be achieved. Our specific recommendations regarding amending Big Game Standard 4(a), therefore, follow directly from		The parameters defining elk security in the selected alternative are the same as those developed with FWP personnel for alternative 3. The selected alternative results in slightly less security in some herd units than under alt 3 however it still represents a substantial improvement over the existing condition.

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		represents a more complete application of the Hillis Paradigm (considering security area patch size, amount, and specific location) than the amendment proposed in the DEIS. To successfully implement this approach to elk security management, road closures must be effective and enforced. When possible, permanent closures are preferable to relying on signage or gates.		
	Minimum amount of retained security area	In order to correctly apply the Hillis Paradigm the Forest Service would need to analyze, and ensure provision of, security areas across the full fall range of the District's EHUs. The authors stress that, "to be biologically meaningful, analysis unit boundaries should be defined specifically by the local herd home range during hunting season" and should not be adjusted for land ownership. We understand why this is not practical on the LRD and why the Forest Service proposes to limit its analysis of elk security to lands within the National Forest boundary. The boundaries of several of the EHUs presented in the Big Game Security standard analysis in the DEIS were incorrect and did not include significant off-Forest elk herd-use areas (year-round, winter, or fall). To our knowledge, the boundaries of the EHUs east of the Continental Divide were not generated with input from FWP biologist(s) for any of the iterations listed in the DEIS, and they now incorrectly truncate the actual EHU boundary within private lands, arbitrarily 1.5 miles beyond the Forest boundary. This significantly under represents several of the Lincoln Ranger District's actual EHUs.		The Amendment reflects collaborative discussions and meetings with MFWP including discussions of elk herd unit configuration and use of herd unit designation as a Forest Plan unit of measure.
		In the DEIS, the HNF used these incorrect EHUs in its analyses of the effects of the proposed Amendment (footnote "9," p. 490). However, the proposed Amendment itself states that only that portion of the fall EHU "within the HNF administrative boundary" would actually form the denominator of the fraction of the EHU that would be maintained as secure habitat. All LRD herd units include non-Forest Service (primarily private) lands; in some cases, the Forest Service manages only a minority of a herd unit's actual fall range. The Forest Service cannot restrict, nor effectively analyze, fall motorized-use of private land within (actual) LRD herd units.  Therefore, these private lands must be considered insecure for the purposes of any security standard compliance analysis.  The Hillis Paradigm recommends that a minimum of 30% of an analysis unit be comprised of security areas (Canfield 1991). This is clearly an untenable		

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		standard given unequal distribution of private lands within and among LRD herd units.  Finally, because both the proportion of National Forest land and the functional security of private lands within herd units vary across the District's herd units, application of a single, uniform, security area retention standard for all herd units is inappropriate.  Because the Forest Service has no authority or ability to monitor fall motorized travel within significant (mostly private) portions of the LRD EHUs, a full application ofthe Hillis Paradigm is not possible. For an amended Lincoln Ranger District Big Game Security standard to both meet management objectives and allow consistent project-level analyses, it should		
		only consider security areas within the National Forest boundary over which it has motorized travel management authority.  The LRD should also develop security-area retention standards for each individual LRD EHU. FWP recommends that those standards be tiered directly to the relative acreage of secure areas in each EHU that results from the implementation of the Blackfoot Travel Plan DEIS Alternative 3.		
	Fall season hunting dates	Hillis and others suggest that for habitat patches to be considered "secure" there should be no motorized routes open near or through them during the fall hunting season. The proposed amendment incorrectly identifies the fall hunting season as 10/1512/1. Archery elk, fall black bear, fall mountain lion, mountain grouse, and other hunting seasons open during early September. Elk would be vulnerable in and displaced from insecure habitat during September and early October under the current proposal. The LRD should consider all routes that are open to public motorized travel at any time between 9/1 and 12/1 when calculating security areas. FWP agrees with the USFS and FWP Collaborative Elk Habitat Working Group recommendation that low intensity and occasional administrative travel and management activity on fall closed routes would not change their status for the purposes of the security area analysis.		The Amendment is based on security as defined by a 9/1 closure.
	Recommendat ions	To be effective, security areas should be both large and thoughtfully arranged within EHUs. FWP has actively worked with the public and Helena Forest staff since at least 2008 to develop a revised Blackfoot Travel Plan. We explicitly considered the habitat needs of a suite of fish and wildlife		The Amendment reflects collaborative discussions and meetings with MFWP.

Letter number and date	Subject	Comment/Concern	Existing Public Comment Statement (PCS) <sup>1</sup>	Response
		species, including elk, during that process. FWP biologists consistently argued that fall motorized-route density was too high in certain portions of the LRD and that specific routes and motorized-use areas unacceptably compromised elk habitat security. FWP also supported the maintenance and establishment of some motorized roads and trails in areas where they would have fewer impacts on fish and wildlife habitat.		
		FWP's elk security recommendations are largely reflected in Alternative 3 of the Blackfoot Travel Plan DEIS. Adoption of this alternative would increase and distribute large blocks of secure fall habitat throughout elk herd units within the Ranger District. Implementing this alternative would increase bull survival, help preserve general bull harvest opportunity in most LRD hunting districts, and reduce displacement of public elk to private land during the fall hunting season. If the HNF adopts Alternative 3 (as FWP recommends) it could also immediately comply with a Big Game Security standard that directly tiers to and supports this Travel Plan alternative. A Big Game Security standard would then simply ensure that the total amount, distribution, and minimum size of secure habitat patches resulting from the implementation of Alternative 3 are maintained over time. It is our hope that this approach would better balance the Forest's need for management flexibility with its clear elk habitat management mandate.		The selected alternative incorporates components of Alts 3 and 4 although elk security is closest to that of Alt 3.
		<ul> <li>While FWP supports the designation of elk security areas as a means to both manage and measure functional elk security within established Lincoln Ranger District EHUs, we believe the approach was mistakenly applied in the original Amendment proposal. As an alternative, we suggest the following: <ol> <li>Because the Forest Service can only manage and effectively monitor motorized use of land under its jurisdiction, any standard for Big Game Security should only consider the area of constituent elk herd units lying within the National Forest boundary.</li> <li>All motorized routes and private land open to public travel between 911 and 1211 should be included in the analysis.</li> <li>Security areas within the National Forest boundary should be defined as LNF lands &gt;0.5 miles from roads, trails, and private land open to public motorized travel during the fall season (9/ 11211). Patches having constrictions &lt;0.5 mile in width should be separated at that constriction and analyzed individually.</li> </ol> </li></ul>		The Amendment reflects these recommendations; however the preferred travel plan alternative is Alternative 4

Letter number and date	Subject	Comment/Concern	Existing Public Comment Statement (PCS) <sup>1</sup>	Response
		<ol> <li>We recommend that only patches meeting the above criteria that are larger than I ,000 acres be considered "security areas" for the purposes a Big Game Security Amendment.</li> </ol>		
		<ol> <li>The proportion of individual elk herd units that meet the above security area criteria that result from the implementation of Alternative 3 of the 2013 Blackfoot Travel Plan DEIS should form the basis of an amendment to the LRD Big Game Security standard.</li> </ol>		
		FWP no longer collects data tracking the percentage of bulls harvested during the first week of the rifle season; no recent data are available to assess habitat security using this metric. Instead, FWP uses harvest data and post-season aerial classification surveys to monitor LRD elk herds.		Appendix F includes an updated tabulation of MDFWP aerial survey data relative to elk objectives in the Montana Elk Plan (2004).
		Hunting districts 280, 281, 284, and 293 (located west of the Continental Divide) include approximately 87% of the Blackfoot Travel Plan area.		
	Status of elk herds in the travel plan	HDs 280, 281, 284. Annual aerial surveys of elk in HD 281 north of Highway 200 are used to evaluate elk population status in that hunting district, as well as adjacent HDs 284 and 280. Total elk numbers are currently within objective in HD 281 (not "above," as stated in the DE IS) and have not significantly increased since I986. Bull survival (a 3-year average of 9 bulls: I 00 cows, observed in spring) is		
	area	consistently below the objective of I5 bulls: I 00 cows prescribed by Montana's Elk Management Plan (MFWP 2005).		
		HD 293. Annual aerial surveys are also conducted in HD 293 south of Highway 200. Elk numbers are significantly, and chronically, below FWP objective in this hunting district (contrary to assertions in the DEIS, e.g., p. 236); declines have been most pronounced in the northern portion of the HD that includes this Travel Plan area. The 5-year average bull: I 00 cow ratio (11: I 00 cows) is only slightly above the HD's minimum objective of I 0:100 cows. Displacement of elk from public land to private land refuges is an increasing concern.		
		Hunting districts 339 and 343 include portions of the Blackfoot Travel Plan area east of the Continental Divide.		

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		HD 339. This hunting district is a special management area for bulls, with a limited number of either-sex permits issued. This HD is currently within population objective (700 ± 20%), with approximately 800 elk observed during winter surveys the past 2 years (20 II-12 and 20 I2-13). This HD has been below the longterm average for cow-to-calf ratios for 6 out of the last I 0 years. Given that this district has limited entry permits for bull harvest, bull-to-cow ratios are expected to be closely tied to the regulation. FWP does not think that it is appropriate to use bull-to-cow ratios as an indicator of sufficient habitat security for this HD, because this metric is likely confounded by the bull regulation in place for this HD.		
		HD 343. This hunting district is managed for general bull hunting opportunities; brow-tined bull harvest is legal with a general license. This HD appears to have been within population objective for the past 15 years (no survey was conducted in several of those years and two additional years of data are not comparable). This HD has been below the long-term average for cow-to-calf ratios 7 out of the last 12 years. The bull-to-cow ratio has been either right at or below the minimum objective of I 0: I 00 during the same period (6 of 12 years; bull-to-cow ratios are unavailable for 3 of the 15 years). Thus, the existing levels of big game security have not been yielding bull-to-cow ratios within FWP objectives in all years as stated in the DEIS, and improvements to habitat security may also improve bull survival in this HD.		
		FWP disagrees with the statement, "Areas used during fall area [are] generally also on public lands unless weather induces elk to move to lower elevation winter areas on private land" (DEIS Ch. 3, p. 183). This is not the case east of the Continental Divide in FWP's Region 3; elk habitat use during the fall hunting season (September !December I) extends well beyond the Forest boundary east of the Continental Divide.		
<b>FORM 5</b> 4/24/13 Daugaar d	Big Game Security Amendment	Same as letter 288-FORM 5		

Letter number and date	Subject	Comment/Concern		Existing Public Comment Statement (PCS) <sup>1</sup>	Response
FORM 5 4/24/13 Wirt	Big Game Security Amendment	Same as letter 288-FORM 5			
FORM 5 4/24/13 Burns	Big Game Security Amendment	Same as letter 288-FORM 5			
FORM 5 4/25/13 Garber	Big Game Security Amendment	Same as letter 288-FORM 5			
FORM 5 4/25/13 Garber	Big Game Security Amendment	Same as letter 288-FORM 5			
FORM 5 4/25/13 Loomis	Big Game Security Amendment	Same as letter 288-FORM 5			
FORM 5 4/25/13 Benson	Big Game Security Amendment	Same as letter 288-FORM 5			
		Totals			
Letters that were already-identified form letters (form letter 1)			6		
Letters that were unique		1	1		
Letters that were a new form letter (form letter 5)			23		
Gran	nd total	4	10		

# Letters from the EPA and MFWP in full



#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 8, MONTANA OFFICE FEDERAL BUILDING, 10 West 15<sup>th</sup> Street, Suite 3200 HELENA, MONTANA 59626

Ref: 8MO

March 6, 2013

Ms. Amber Kamps Lincoln District Ranger Helena National Forest 1569 Highway 200 Lincoln, Montana 59639

Re:

CEQ #20130012; EPA Comments on Blackfoot Travel Plan Draft Environmental Impact Statement

Dear Ms. Kamps:

The U.S. Environmental Protection Agency (EPA) Region VIII Montana Office has reviewed the Draft Environmental Impact Statement (DEIS) for the Lincoln Ranger District, Helena National Forest, Blackfoot Travel Plan. The EPA reviews EISs in accordance with its responsibilities under Section 102(2) (C) of the National Environmental Policy Act (NEPA), Section 309 of the Clean Air Act, and the Council on Environmental Quality (CEQ) regulations for implementing NEPA, 40 CFR Parts 1500-1508. Section 309 of the Clean Air Act directs EPA to review and comment in writing on the environmental impacts of any major Federal agency action. The EPA's comments include a rating of the environmental impact of the proposed action and the adequacy of the NEPA document.

The EPA appreciates the efforts of the Lincoln Ranger District and Helena National Forest in preparing the Blackfoot Travel Plan/DEIS. We support Forest Service efforts to properly manage and control motorized activities so that they occur in a manner and location consistent with protection of the environment and ecosystems for use by future generations. We believe motorized uses in general are more likely to accelerate erosional processes, worsen poor road conditions, and increase stream sedimentation and degradation of fisheries habitat when compared to non-motorized uses. Roads often tend to become wider and rutted with heavy motorized use, creating a greater need for monitoring of road conditions, and for road maintenance for repair and erosion control. Sediment yields are generally higher from motorized routes than from non-motorized routes.

We fully support proposed development of motor vehicle use maps (MVUMs) for the Blackfoot Travel Planning Area, including prohibition of wheeled motor vehicles uses that are not consistent with MVUM designations which should improve public understanding of travel rules. This should in turn improve compliance with and enforcement of Travel Plan requirements, and reduce adverse environmental impacts associated with roads and motorized uses.

It is important, therefore, that the preferred alternative manage motorized routes and motor vehicle access adequately to protect water quality and fisheries habitat, soil integrity, wildlife habitat and



security. Management of motorized routes should address forest connectivity and reduce habitat fragmentation by motorized routes, and reduce threats of weed invasion, while allowing adequate access for management and recreation. The challenge is in providing adequate access for land management and public recreation while protecting and restoring aquatic and terrestrial ecosystems. Where there are conflicts between access and recreational use and long-term protection of resources and ecosystems, we believe resource and ecosystem protection must be given priority to sustain and protect resources and ecosystems for use by future generations.

Of the two action alternatives evaluated in the DEIS, we support Alternative 3 which appears to better address the adverse environmental impacts associated with roads and motorized uses. Alternative 3 includes the lowest mileage of roads and trails open to motorized uses; lowest open road density (1 mi/mi²), especially in sensitive wildlife habitats; most miles of road decommissioning (197 miles); greatest reduction of road sediment transport to streams (24.6 tons sediment reduction); greatest reduction in riparian roads (31 more miles of riparian road decommissioned with Alternative 3 in comparison to Alternative 2); most road culvert removals (104 more culvert removals); least motorized routes on sensitive soils and least motorized routes in roadless areas. We believe Alternative 3 will result in greater benefit to watershed conditions, and better addresses wildlife concerns associated with roads and motorized uses, relative to Alternative 2 and no action (Alternative 1).

We have the greatest environmental concern with the no action alternative (Alternative 1) that would leave many unauthorized roads causing resource damages on the landscape, and not include preparation of a MVUM for the travel planning area. While Alternative 2 includes preparation of a MVUM, it also includes more roads and motorized uses resulting in less protection for watersheds, water quality, fisheries and wildlife habitat and security, and more weed spread. The EPA considers Alternative 3 to be the environmentally preferred alternative. We encourage the Helena NF to select Alternative 3.

While we appreciate the Helena NF's proposed development of a MVUM for the planning area to designate routes open and closed to motorized travel, and to store, relocate, and/or decommission routes in sensitive locations that cause resource damages, we have concerns regarding adequacy of road maintenance and road BMP implementation. Roads are often the major anthropogenic sediment source adversely affecting hydrology, water quality, and fisheries of streams. The Travel Plan/DEIS does not make it clear whether the roads remaining on the landscape in the planning area are, or will be, adequately maintained. It is known that prolonged under-funding of road maintenance on National Forests has resulted in degraded road conditions, and there is a significant backlog of road maintenance needs on National Forests (Source: "Rightsizing" the Forest Service Road System Part 1: Road Trend Analysis, March 22, 2007). Adequate funding is needed to properly maintain roads remaining on the landscape. Improvements to forest road systems and conduct of proper road maintenance and road BMP and drainage improvements are critical to protecting aquatic health.

We believe road and trail networks should be limited to those that can be adequately maintained within agency budgets and capabilities. Roads which cannot be properly maintained should be decommissioned. We support prioritizing decommissioning of roads close to streams to maximize water quality improvement benefits. We recommend that the FEIS include additional discussion of road conditions, and adequacy of road maintenance and BMPs, and adequacy and availability of funding to implement needed road/trail BMPs. We suggest that such information be added to the road details in Appendix C.

# RECEIVED

# MAR 1 I 2013

# LINCOLN RANGER DISTRICT

The Blackfoot travel planning area includes waterbodies listed as water quality impaired by the Montana Department of Environmental Quality (MDEQ) under Section 303(d) of the Clean Water Act (e.g., Arrastra Creek, Blackfoot River, Sandbar Creek, Willow Creek, Poorman Creek, Ward Creek, Buffalo Gulch, Jefferson Creek, Nevada Creek, Washington Creek). Sediment (largely from forest roads) is identified as the principle cause of water quality impairment. It is important that the Travel Plan avoid further degradation of impaired waters. The Helena NF should coordinate travel planning with the MDEQ to assure travel plan consistency with total maximum daily loads (TMDLs) and water quality restoration plans being prepared by MDEQ for restoration of full support for beneficial uses in 303(d) listed streams within the planning area (i.e., contact MDEQ staff Mr. Robert Ray at 406-444-5319 and Mr. Dean Yashan at 406-444-5317). We also encourage review of the MDEQ's pamphlet, "Understanding the Montana TMDL Process," which can be downloaded at <a href="http://deq.mt.gov/wqinfo/TMDL/default.mcpx">http://deq.mt.gov/wqinfo/TMDL/default.mcpx</a>.

We also note that Executive Orders 11644 and 11989, "Use of Off-Road Vehicles on Public Lands," require agencies to ensure that the use of off-road vehicles on public lands will be controlled and directed so as to protect the resources of those lands; promote the safety of all users of those lands; and to minimize conflicts among users. We agree that MVUMs that clearly identify designated motorized routes, supplemented by signs on the ground, should promote improved public understanding of travel requirements and user compliance. However, we also believe policing and enforcement are needed to supplement MVUMs, promote travel plan compliance, and better ensure adequate protection of water quality, fisheries, wildlife, and other sensitive resources.

Finally, the draft Plan/DEIS did not include much discussion of monitoring and adaptive management in regard to monitoring and evaluating effects of Plan implementation, particularly identification of undesirable road/trail conditions, problems, or unexpected results that may occur, so they can be mitigated. We recommend that the FEIS provide additional disclosure in regard to monitoring and adaptive management and potential outcomes of travel management. For example, stating that roads or trails will be closed if monitoring shows that motor vehicle use is causing or will cause adverse effects on public safety or water quality, fish habitat, soil, vegetation, wildlife, wildlife habitat, or cultural or historic resources.

The EPA's more detailed questions, comments, and concerns regarding the analysis, documentation, or potential environmental impacts of the Blackfoot Travel Plan DEIS are included in the enclosure with this letter. Based on the procedures EPA uses to evaluate the adequacy of the information and the potential environmental impacts of the proposed action have been rated as Category EC-2 (Environmental Concerns - Insufficient Information). The EPA's environmental concerns are associated with impacts to water quality, fisheries, wildlife and other resources resulting from roads and motorized uses that cause resource damages, particularly in regard to Alternative 1 (no action) that would leave many unauthorized roads causing resource damages on the landscape and not include preparation of a MVUM for the travel planning area, and Alternative 2 that includes more roads and motorized uses and higher road densities resulting in less protection for watersheds, water quality, fisheries and wildlife habitat and security, and more weed spread. We have fewer environmental concerns with Alternative 3, although some environmental concerns remain relative to adequacy of resources to properly maintain roads and to police and enforce Travel Plan requirements. A summary of EPA's DEIS rating criteria is attached.

If you have any questions you may contact Mr. Steve Potts of my staff in Helena at (406) 457-5022 or in Missoula at (406) 329-3313, or via e-mail at  $\underline{potts.stephen@epa.gov}$ . We appreciate your willingness to consider our comments at this stage of the NEPA process. Sincerely, Acting Director Montana Office Enclosures Suzanne Bohan/Judy Roos, EPA, 8EPR-N, Denver Robert Ray/Dean Yashan, MDEQ, Helena

# **EPA Comments on the Draft EIS for the Blackfoot Travel Plan**

# Brief Project Overview:

The Helena National Forest (NF) prepared the Blackfoot Travel Plan DEIS to evaluate proposed changes to the existing system of designated motorized public access routes and prohibitions within the Blackfoot travel planning area for wheeled motorized vehicles. The project area encompasses approximately 238,000 acres of National Forest System (NFS) lands on the Lincoln Ranger District, Helena NF in Montana, including Inventoried Roadless Areas (IRAs), but not wilderness.

The objective of the Travel Plan is to provide a manageable system of designated public motorized access routes and areas, consistent with and to achieve the purposes of Forest Service travel management regulations (36 CFR Part 212, subpart B). Designated wheeled motorized routes within the project area would be displayed on a motor vehicle use map (MVUM), and public use of wheeled motor vehicles other than in accordance with the MVUM designations would be prohibited. The analysis is focused on non-winter use; travel routes over snow are not included. Winter travel is being addressed in a separate analysis. Three alternatives were evaluated, no action and two action alternatives. Both action alternatives include proposals for non-motorized uses and methods to physically store, decommission, relocate, and construct certain roads and trails. A preferred alternative was not identified.

<u>Alternative 1</u> is the no action alternative involving no changes to the existing system of available public motorized routes and areas within the travel planning area, and no development of an MVUM. Currently there are approximately:

- 446 miles of NFS roads in the Blackfoot travel planning area open to public motorized use
- 60 miles of motorized trails
- 71 miles of non-motorized trails
- 93 miles of roads acquired through land exchange (13 miles of which are currently open to motorized use)
- 62 miles of roads not previously part of the road or trail inventory (unauthorized routes) that is currently open to public motorized use
- 21 miles of roads considered to be naturally decommissioned per field investigations (roads that are vegetated to the point that they are not drivable and thus are reclaimed on their own or naturally decommissioned

Alternative 2, the proposed action, involves the following changes to designated travel routes:

- Approximately 98 miles of roads would be closed to public wheeled motorized use (348 miles of NFS roads would still be available)
- Approximately 30 additional miles of motorized trails would be designated (92 miles of motorized trails would be available)
- Approximately 51 additional miles of non-motorized trails would be designated (122 miles of non-motorized trails would be available)
- · Approximately 2 miles of new motorized trail would be constructed
- Approximately 31 miles of new non-motorized trail would be constructed
- There would be no change to approximately 21 miles of roads currently considered naturally reclaimed/decommissioned per field investigations (roads that are vegetated to the point that they are not drivable and thus are reclaimed on their own, or naturally decommissioned)

- Approximately 62 miles acquired through land exchange would be identified for closure, storage or decommissioning.
- Approximately 39 miles not previously part of the road or trail inventory (unauthorized routes) would be identified for closure, storage or decommissioning
- Approximately 133 miles of roads would be stored
- · Approximately 8 miles of roads would be decommissioned

Alternative 3 was prepared to respond to issues regarding wildlife habitat and security, fisheries and water quality, and the quality of the non-motorized trail system, and would include the following:

- Approximately 139 miles of roads would be closed to public wheeled motorized use (307 miles of NFS roads would still be available)
- Approximately 13 miles of motorized trails would be closed (47 miles of motorized trails would be available)
- Approximately 88 miles of additional non-motorized trails would be designated (159 miles would be available)
- · Approximately 3 miles of new motorized trail would be constructed
- Approximately 0.5 miles of new road would be constructed
- Approximately 31 miles of new non-motorized trail would be constructed
- Approximately 21 miles of roads would be considered naturally decommissioned per field investigations (roads that are vegetated to the point that they are not drivable and thus are reclaimed on their own or naturally decommissioned).
- 67 miles acquired through land exchange would be identified for closure, storage or decommissioning.
- 54 miles not previously part of the road or trail inventory would be identified for closure, storage or decommissioning
- Approximately 75 miles of road would be stored
- · Approximately 197 miles of road would be decommissioned

#### Comments:

1. The EPA appreciates the inclusion of clear descriptions of alternatives, including tables depicting route mileage under each type of use; Table 4 showing typical levels of road closure, storage and decommissioning; listing of project design features and mitigation measures; discussion of alternatives considered but eliminated; Table 6 comparing alternatives; road details by alternative in Appendix C; maps of alternatives in Appendix G; and road BMPs in Appendix H. The alternatives descriptions, tables, including summary comparison tables, maps, and other appended information help clarify alternatives, define issues, and provide a basis of choice among alternatives for the decisionmaker and the public as directed by the CEQ's regulations for implementing NEPA (40 CFR 1502.14).

#### **Alternatives**

2. Forest Travel Plans are critical elements in the management of National Forests, providing direction to manage road and trail networks for public recreation and conduct of land management activities. Public recreational demand and access has increased significantly in recent years, and motorized uses and roads in many cases have caused increased damage to

aquatic and terrestrial resources. We have been concerned about environmental effects of roads, trails and motorized uses, particularly increasing use of off-highway vehicles (OHVs) and all-terrain vehicles (ATVs) that occur away from roads and trails, including steep slopes, fragile soils, wet meadows, and around water bodies.

Newer motorized vehicles such as trail bikes, ATVs, 4x4's, and snowmobiles can access areas much further into the Forest than they could historically, forcing wildlife onto smaller and smaller patches of habitat, fragmenting habitat and migration corridors, affecting wildlife behavior and life history functions and adversely affecting wildlife security and increasing wildlife mortality; and causing soil erosion and adverse effects to water quality, aquatic habitat and fisheries; increased dust emissions to air; and spreading weeds. Demand for recreation opportunities on public land may be exceeding the capability of the land and resources to provide recreation in a manner that is consistent with resource and ecosystem protection. The Helena NF faces a great challenge in providing adequate access for land management and public recreation while protecting and restoring aquatic and terrestrial ecosystems.

We fully support the Helena NF's proposed preparation of MVUMs and prohibition of wheeled motor vehicles uses that are not consistent with MVUM designations. It is important to restrict motorized vehicles to designated routes and prevent of cross-country travel that causes resource damages. Adequate limitations and restrictions on motorized uses are needed to address motorized travel impacts to watersheds, water quality, fisheries, soil integrity, air quality, wildlife habitat/security, restore forest connectivity and reduce habitat fragmentation by motorized routes while allowing adequate access for management and recreation, reduce spread of weeds, and protect other ecologically sensitive resources and ecosystem functions. Where there are conflicts between access and recreational use and long-term protection of resources and ecosystems, we believe resource/ecosystem protection must be given priority to sustain and protect resources and ecosystems for use by future generations.

We believe motorized uses in general are more likely to accelerate erosional processes and worsen poor road/trail conditions, and increase stream sedimentation and degradation of fisheries habitat when compared to non-motorized uses. Roads/trails often tend to become wider and rutted with heavy motorized use, creating a greater need for monitoring of road/trail conditions, and for road and trail maintenance for repair and erosion control. Sediment yields are generally higher from motorized routes than from non-motorized routes. Increased motorized uses on routes with numerous stream crossings and/or routes near streams can aggravate sediment transport to streams. Weed spread is also increased by motorized uses.

Of the two action alternatives evaluated, we support Alternative 3 which will reduce adverse environmental impacts associated with roads and motorized uses more than Alternative 2. Alternative 3 has lowest mileage of roads and trails open to motorized uses; lowest open road density (1 mi/mi²), including lowest open road density in sensitive wildlife habitats; most miles of road decommissioning (197 miles); greatest reduction of road sediment transport to streams (24.6 tons sediment reduction, Tables 25 and 26, pages 92 and 95); greatest reduction in riparian roads (31 more miles of road within 150 feet of a stream decommissioned with Alternative 3 in comparison to Alternative 2); most road culvert removals (104 more culvert removals); least motorized routes on sensitive soils; least motorized routes in IRAs; etc.). We agree with the

statement in the DEIS that Alternative 3 has the greatest potential to benefit watershed values (page 73), since it would restore the greatest amount of riparian areas and stream channels; remove more negative impacts to fisheries and aquatic species due to culverts that block fish passage and are at risk or failure; reduce more sedimentation from roads within 150 feet of streams; and restore more riparian function and floodplain connectivity (page 97).

We have the greatest environmental concerns with Alternative 1, no action, since that would not include preparation of MVUMs and would leave many unauthorized roads causing resource damages on the landscape (page 55). While Alternative 2 includes preparation of a MVUM which we support, it also includes more roads and motorized uses and less protection for watersheds, water quality, fisheries and wildlife habitat and security, and weed spread associated with increased motorized uses, in comparison to Alternative 3. The EPA considers Alternative 3 to be the environmentally preferred alternative, and encourages the Helena NF to select Alternative 3 as the preferred alternative.

#### Water Quality/Aquatic Habitat

- 3. The Blackfoot travel planning area includes Nevada, Middle Blackfoot, and Blackfoot Headwaters total maximum daily load (TMDL) planning areas as well as smaller portions of the Little Blackfoot, Dearborn, and Holter TMDL planning areas (page 63). We appreciate the identification of water quality impaired waterbodies, listed by the Montana Department of Environmental Quality (MDEQ) under Section 303(d) of the Clean Water Act, within the travel planning area (Table 17, page 65). Sediment (largely from forest roads) is identified as the principle cause of water quality impairment. We note that there are many more water quality impaired waterbodies in the Blackfoot River watershed (4th field HUC 17010203) identified on MDEQ's 303(d) listing website (http://cwaic.mt.gov/query.aspx) than are shown in Table 17. We recommend that the Table 17 list of water quality impaired waters within the Blackfoot Travel Planning Area be checked to be sure it includes all impaired waters within the travel planning area.
- 4. Further degradation of water quality impaired waterbodies should be avoided. The DEIS reports that the Blackfoot Headwaters TMDL (MDEQ 2008) recommended a 30 percent reduction in sedimentation from forest roads, and 100 percent reduction from non-system roads (page 65). We recommend that the Helena NF consult with MDEQ TMDL program staff to assure that the MDEQ considers the Blackfoot Travel Plan to be consistent with development and implementation of applicable TMDLs and water quality improvement and restoration of support for beneficial uses in 303(d) listed streams within the planning area (contact MDEQ staff such as Mr. Dean Yashan at 406-444-5317, and/or Mr. Robert Ray at 406-444-5319). We note that sources of pollutant loading may occur in unlisted tributaries to listed streams, and TMDLs must account for all sources of pollution; hence there is a need to address road/trail related pollution sources in the watersheds of 303(d) listed waters. We also encourage review of the MDEQ's pamphlet, "Understanding the Montana TMDL Process," which can be downloaded at <a href="http://deq.mt.gov/wqinfo/TMDL/default.mcpx">http://deq.mt.gov/wqinfo/TMDL/default.mcpx</a>.
- The condition of forest road/trail networks and limited funding available for route maintenance are a significant concern of EPA, since roads are often the major anthropogenic sediment source

adversely affecting hydrology, water quality, and fisheries of streams. The DEIS acknowledges that roads produce the most sediment amongst forest activities, particularly for roads located near streams, and roads can create conditions for mass soil failures and landslides if located in sensitive areas (page 87). Older roads built with outdated management practices (those dating from the 1950s to the mid-1970s), poorly maintained roads, roads near streams, and roads with numerous stream crossings greatly increase the possibility of erosion and sediment transport to streams, which can adversely impact water quality, aquatic habitat, fisheries, and channel hydrology and stability. Road/trail maintenance, erosion control, and repair are intrinsically related to travel planning. Motorized uses on roads/trails often creates a greater need for carrying out repair and erosion control.

The DEIS states that roads that receive higher amounts of motorized use would continue to be maintained on a regular basis; as would roads that need maintenance to prevent resource damage (page 53). Lower use roads would continue to receive sporadic maintenance; although the maintenance backlog would remain for the lower standard roads for all alternatives. We note that it is known that prolonged under-funding of road maintenance on National Forests has resulted in degraded road conditions, and that there is a significant backlog of road maintenance needs on National Forests (Source: "Rightsizing" the Forest Service Road System Part 1: Road Trend Analysis, March 22, 2007). Adequate funding for road maintenance and implementation of road BMPS is needed to address water quality effects of roads. Conduct of proper road maintenance and improvements to forest road systems and road BMPs and drainage improvements are critical for protecting aquatic health.

We believe road and trail networks should be limited to those that can be adequately maintained within agency budgets and capabilities. Roads which cannot be properly maintained should be decommissioned. EPA's water quality concerns are greater where routes are located near surface waters, where there are numerous stream crossings, and where routes are in poor condition. We support prioritizing decommissioning of roads close to streams rather than roads on upper slopes or ridges to maximize water quality improvement benefits.

Specific concerns include road/trail drainage and surface erosion, adequacy of waterbars, drain dips, ditch relief culverts to avoid drainage running on or along roads/trails; interception and routing of sediment to streams; unstable stream crossings and potential for washout; culvert sizing, culvert allowance of fish migration and effects on stream structure and seasonal and spawning habitats; supplies of large woody debris; open road/trail density; number of stream crossings; eliminating fords, armoring stream channels at stream crossings, graveling roads, reducing motorized uses in more erosive areas; road/trail encroachment on stream, riparian, and wetland habitats; and relocating roads/trails away from streams where possible.

While we are pleased that Alternative 3 will reduce aquatic effects of roads and motorized uses (as noted in comment #2 above), we recommend that the FEIS include additional discussion of road and trail conditions, and adequacy of road/trail maintenance and BMPs, and availability of funding to implement needed road/trail BMPs. We suggest that Appendix C include information regarding road conditions and the adequacy of road BMP maintenance for roads that will remain on the landscape. This would demonstrate that the Helena NF is evaluating road/trail conditions and water quality problems, and identifying opportunities to improve road BMPs, thus,

evidencing a commitment to implement/trail needed road maintenance and improvements in the near future. There should be a continuing road and trail inspection, evaluation and maintenance program in place to identify road/trail drainage and BMP needs, including an inspection, evaluation and road/trail maintenance program, and adequate funds to correct road/trail deficiencies.

- 6. We appreciate the presentation and discussion of project design and mitigation features in DEIS Chapter 2 (page 28-31), the identification of road BMPs in Appendix H. For your information EPA's general recommendations regarding roads are as follows:
  - \* minimize road construction and reduce road density as much as possible to reduce potential adverse effects to watersheds;
  - \* locate roads in uplands, away from streams and riparian areas as much as possible;
  - \* minimize the number of road stream crossings;
  - \* locate roads away from steep slopes or erosive soils and areas of mass failure;
  - \* stabilize cut and fill slopes;
  - \* provide for adequate road drainage and control of surface erosion with measures such as adequate numbers of waterbars, maintaining crowns on roads, adequate numbers of rolling dips and ditch relief culverts to promote drainage off roads avoid drainage or along roads and avoid interception and routing sediment to streams;
  - \* consider road effects on stream structure and seasonal and spawning habitats;
  - \* allow for adequate large woody debris recruitment to streams and riparian buffers near streams;
  - \* properly size culverts to handle flood events, pass bedload and woody debris, and reduce potential for washout;
  - \* replace undersized culverts and adjust culverts which are not properly aligned or which present fish passage problems and/or serve as barriers to fish migration;
  - \* use bridges or open bottom culverts that simulate stream grade and substrate and that provide adequate capacity for flood flows, bedload and woody debris where needed to minimize adverse fisheries effects of road stream crossings.

Blading of unpaved roads in a manner that contributes to road erosion and sediment transport to streams and wetlands should be avoided. It is important that road grading focus on reducing road surface erosion and sediment delivery from roads to area streams. Practices of expediently sidecasting graded material over the shoulder and widening shoulders and snow plowing can have adverse effects upon streams, wetlands, and riparian areas that are adjacent to roads. These practices should be avoided.

Roads are particularly vulnerable to damage during spring breakup as overly-saturated roadbeds from winter freezing are working to dry out, and this typically occurs between March 30 and June 30, but can vary depending on the severity of the winter and spring weather conditions. We encourage avoiding road use during spring breakup conditions, and closing roads to log haul during spring break up to reduce rutting of roads that increase road erosion and sediment delivery, and graveling of haul roads. Snow plowing of roads later in winter for log haul should also be avoided to limit runoff created road ruts during late winter thaws that increase road erosion (i.e., ruts channel road runoff along roads increasing erosion and sediment transport).

We encourage routine conduct of inspections and evaluations to identify conditions on roads and other anthropogenic sediment sources that may cause or contribute to sediment to streams, and to include activities in the project to correct as many of these conditions and sources as possible. Forest Service Region 1 provides training for operators of road graders regarding conduct of road maintenance in a manner that protects streams and wetlands, (i.e., Gravel Roads Back to the Basics). If there are road maintenance needs on unpaved roads adjacent to streams and wetlands we encourage utilization of such training (contact Fred Bower FS R1 Transportation Management Engineer, at 406-329-3354).

We also note that there are training videos available from the Forest Service San Dimas Technology and Development Center for use by the Forest Service and its contractors (e.g., "Forest Roads and the Environment"-an overview of how maintenance can affect watershed condition and fish habitat; "Reading the Traveled Way"-how road conditions create problems and how to identify effective treatments; "Reading Beyond the Traveled Way"-explains considerations of roads vs. natural landscape functions and how to design maintenance to minimize road impacts; "Smoothing and Reshaping the Traveled Way"-step by step process for smoothing and reshaping a road while maintaining crowns and other road slopes; and "Maintaining the Ditch and Surface Cross Drains"-instructions for constructing and maintaining ditches, culverts and surface cross drains).

7. We fully support road storage/rehabilitation, closure and decommissioning, particularly removal of road stream crossings, and obliteration of illegally user created non-system roads causing resource damages. We are pleased that Alternatives 2 and 3 both increase road storage, closures and decommissioning, although as noted earlier we support Alternative 3 since it would close and decommission significantly more roads than Alternative 2, including closure of 34.4 miles of roads with 150 feet of streams (vs. 3.2 miles with Alternative 2, Table 22, page 77). Where roads or trails are located in narrow valleys adjacent to streams where roads/trails cannot be decommissioned, we recommend use of vegetative plantings, silt fences, and/or rock or log placement along the stream banks and/or steep slopes to reduce sediment entry into the streams.

Reductions in road density are an important means of improving watershed health. Areas with higher road density have been correlated with higher levels of stream sedimentation, fisheries impacts, and greater levels of fragmentation of wildlife habitat. Higher quality aquatic habitat and higher populations of fish are often associated with watersheds with low road density. We support reductions in road density, particularly removal of road stream crossings, and closing and obliterating user created non-system roads that cause resource damages.

We note that it is difficult to effectively restrict motorized access and protect public lands with simple gated route closures. Route rip-seed-slash (obliteration or full route recontour) is a more effective, and thus, preferred method of closure. It is important that adequate attention be directed to restoring natural drainages and culvert removal and revegetating natural landscapes by ripping, scarifying, and seeding disturbed areas with native seed. We are pleased that the Helena NF is proposing to restore stable drainage ways during route removal to address water quality concerns with proposed road storage and decommissioning actions in the Blackfoot Travel Plan.

- 8. We are also pleased that Helena NF staff recognize that undersized or poorly positioned road culverts at road stream crossings can increase risks of culvert failures that can exacerbate stream sedimentation (page 66). During a flood event, especially following a wildfire, a culvert can become obstructed or overwhelmed by the magnitude of flow. The consequence of culvert failure is often the erosion and entrainment of road fill around the culvert. We appreciate the inclusion of information on the number of road stream crossings within Blackfoot travel planning area watersheds (DEIS Tables 18 and 19, pages 66-67), and are pleased that Alternative 3 will remove 121 road culverts to reduce stream sedimentation risks associated with culverts (page 41). We note that only 17 culverts would be removed with Alternative 2 (Table 22, pages 76).
- 9. Alternative 2 proposes construction of 2 miles of new motorized trail (page 19), and Alternative 3 proposes construction of 3 miles of new motorized trail and 0.5 miles on new road (page 22). It is important that new roads and motorized trails be located to avoid sensitive soils and erosion hazards and to minimize impacts to sensitive aquatic and terrestrial habitats. The project design and mitigation measures state that new non-motorized trails would be planned and constructed to avoid sensitive areas, using all INFISH and BMPs to minimize impacts to habitat (page 29). It is not clear to us, however, why such a project design and mitigation measure would not state that new motorized and motorized trails and roads would be planned and constructed to avoid sensitive areas, using all INFISH and BMPs to minimize impacts to habitat. Why are motorized trails not included in this design feature/mitigation measure to avoid sensitive areas? This should be explained in the FEIS.

#### Wetlands

10. EPA considers the protection, improvement, and restoration of wetlands to be a high priority. Executive Order 11990 requires that all Federal Agencies protect wetlands. In addition national wetlands policy has established an interim goal of No Overall Net Loss of the Nation's remaining wetlands, and a long-term goal of increasing quantity and quality of the Nation's wetlands resource base. Wetlands increase landscape and species diversity, and are critical to the protection of designated water uses. Possible impacts on wetlands include damage or improvement to: water quality, habitat for aquatic and terrestrial life, channel & bank stability, flood storage, ground water recharge and discharge, sources of primary production, and recreation and aesthetics. Roads and motorized uses in or near wetlands and riparian areas have potential to affect wetland integrity and function.

It is important that appropriate limitations and restrictions be placed on motorized vehicle use to protect against degradation of wetlands. Wetland impacts should be avoided and then be Minimized to the maximum extent practicable, and unavoidable impacts should be compensated for through wetland restoration, creation, or enhancement. The DEIS states that "wetlands, seeps and springs would be protected from ground disturbance in the design features for this project" (page 289), although we did not see wetlands discussed in the Chapter 2 project design features (pages 28-31), other than the statement about obtaining required Clean Water Act Section 404 permits. We suggest that the project design features in Chapter 2 of the FEIS more definitively indicate that wetlands, seeps and springs be protected from ground disturbance as is stated in the Threatened, Endangered and Sensitive (TES) Plants section of the DEIS in Chapter 3 (e.g., pages 288, 289).

We are pleased that the DEIS states that "there would be no measurable effect to wetlands .... from implementing this project" (page 334); and that the Appendix H road BMPs state that "sensitive areas such as riparian areas, wetlands, meadows, bogs, and fens, should be avoided to the extent practicable" (page 515). Although we recommend that a statement be added to the mitigation measures and BMPs indicating that if impacts to wetlands do occur, such impacts will be mitigated (i.e., mitigation means sequence of avoidance, minimization, rehabilitation, and compensation for unavoidable impacts to wetlands).

#### Recreation

11. We appreciate the discussion of recreation in the DEIS (beginning on page 118), including the table of Recreation Opportunity Spectrum (ROS) allocating acres of outdoor recreation by natural resource setting for the travel planning area (Table 31, page 119). The planning area predominately falls into the Roaded Natural, Semi-primitive Motorized, and Semi-primitive Non-Motorized categories due to past and current development, such as roads associated with timber harvest and mining activity. The DEIS states that most wheeled motorized use takes place on open roads with the exception of a few system trails.

While we recognize that a balance of motorized and non-motorized recreational opportunities need to be provided, as noted earlier we believe that motorized uses contribute more to resource and environmental damage than non-motorized uses. Motorized uses push wildlife onto smaller and smaller patches of habitat; reducing migration corridors; increasing adverse effects to wildlife habitat and security; causing soil erosion and adverse effects to water quality and aquatic habitat and fisheries; spreading weeds; and increasing opportunity for vandalism of historic properties. Motorized uses also have the potential to degrade the quality of experience and solitude desired by non-motorized uses (e.g., hiking, viewing natural features and wildlife).

Alternative 1 (no action) and Alternative 2 provide the greatest opportunities for such impacts from motorized uses, and least opportunities for non-motorized recreation without effects of motorized uses. We support increasing opportunities for non-motorized uses such as viewing wildlife or natural features in solitude, as well as reducing environmental and resource impacts. We believe motorized activities should occur in a manner and location that minimize effects to the environment and other public uses. Accordingly, we support Alternative 3 that provides greater limitations on motorized uses to allow greater levels of protection for water quality,

fisheries, wildlife, natural features, and other resources that are used by the public.

12. Both action alternatives would allow wheeled motorized vehicle travel for camping (and parking associated with camping) within 300 feet of designated system routes, including roads and trails (unless signed otherwise), and with a few other requirements such as not creating permanent routes, avoiding damaging to vegetation, soils, and water resources, not crossing streams and riparian areas. We acknowledge the need for the public to have access to dispersed camping sites, and have no objections to the 300 foot motorized access provision for camping sites as long as the requirements to protect important and ecologically sensitive resources are included.

EPA does encourage locating campground facilities, and concentrated public recreational uses away from important or ecologically sensitive resources. ATV and OHV use is common at dispersed campsites. We recommend identifying and/or designating camping sites to avoid sensitive areas as much as possible, and encouraging camping or concentrated public use in areas that are more resilient and that can more easily recover from impacts and/or accommodate public use with fewer impacts. We recommend that the Helena NF identify specific dispersed camping sites where the 300 foot motorized travel limitation would be used, based on adequacy of the limitation to avoid damage to important or ecologically sensitive resources during motorized travel at campsites. We also suggest consideration of a 30 foot no drive zone adjacent to streams, ponds, lakes, marshes, and wetlands.

#### Law Enforcement

13. Executive Orders 11644 and 11989, "Use of Off-Road Vehicles on Public Lands," require agencies to ensure that the use of off-road vehicles on public lands will be controlled and directed so as to protect the resources of those lands, to promote the safety of all users of those lands, and to minimize conflicts among users. We appreciate the discussion of law enforcement in the DEIS (pages 51, 54, 56, 121). We agree that user compliance of Forest regulations on roads and trails is generally related to the level of user understanding of the sign system and available maps. MVUMs that clearly identify designated motorized routes, supplemented by signs on the ground should promote public understanding of travel restrictions.

However, we also believe that policing and enforcement are needed to promote travel plan compliance, and better ensure protection of water quality, fisheries, wildlife, and other sensitive resources. We have concerns regarding the adequacy of resources to enforce travel restrictions necessary for protection of sensitive resources and the environment. It would be helpful if the FEIS would identify the number of full time law enforcement officers stationed on the Helena NF, Lincoln Ranger District, who will be available to police the travel planning area and issue citations for travel management violations.

We are pleased that the Helena National Forest understands that enforcement of the travel plan restrictions would require additional emphasis by the Forest (page 121), and that enforcement assistance may be provided by Montana Fish, Wildlife and Parks, and the public. We support provision of adequate law enforcement personnel to handle the increases in motor vehicle uses occurring on the Forest, particularly increasing enforcement in regard to off-road vehicle users and those violating motorized access restrictions on closed roads and trails, and increasing enforcement staffing on holidays and weekends, when much illegal motor vehicle use occurs.

# Wilderness/Wilderness Study Areas/Roadless Areas

14. There are seven Inventoried Roadless Areas (IRAs) within the Blackfoot planning area (page 130), with approximately 76 miles of existing motorized routes within IRAs (page 133). Motorized recreation within IRAs and wilderness study areas has potential to adversely affect roadless and wilderness values, especially in recognition of trends of increasing public use of OHV's and ATVs that can access previously inaccessible lands and cause resource damages. Under Alternative 2, there would be a decrease of 18 miles of motorized routes within IRAs (page 134), and with Alternative 3 a decrease of 45 miles of motorized routes within IRAs (page 139).

We support the greater reduction in motorized routes within IRAs proposed with Alternative 3, although we have some concern that with Alternative 3 there would still be 31 miles of motorized routes within IRAs (page 139). Will the remaining 31 miles of motorized routes within IRAs with Alternative 3 and especially the 58 miles of motorized routes with IRAs with Alternative 2, allow the solitude and pristine characteristics of such areas to be adequately maintained or protected?

EPA supports protection of the pristine character and integrity of remaining minimally disturbed roadless and wilderness study areas to prevent further fragmentation and degradation of wildlife habitat, and to maintain or restore solitude and primitive recreation characteristics in such areas. Roadless and wilderness study areas often provide population strongholds and key refugia for listed or proposed species and narrow endemic populations due to their more natural undisturbed character. One of the National Strategic Goals regarding the use of motorized equipment in wilderness (FSM 2326.02) is to "Exclude the sight, sound, and other tangible evidence of motorized equipment or mechanical transport within wilderness, except where they are needed and justified."

It is not clear whether this goal would be met in the IRAs in the Blackfoot travel planning area with so many motorized routes remaining within IRAs. Site visits to IRAs with motorized routes may be required to confirm whether sight, sound or odor from motorized uses are tangible. If there are likely impacts, the Forest should indicate whether motorized use that causes adverse impact is "needed and justified." It is important that our last remaining roadless and wildlands remain unspoiled and natural in order to provide clean water and air, sanctuary for native wildlife and plant species, and opportunities for low impact human recreation.

We encourage the Helena NF to adequately restrict motorized uses in IRAs and wilderness study areas to maintain or restore solitude and primitive recreation characteristics in such areas and prevent fragmentation and degradation of wildlife habitat. Motorized routes created by cross-country travel in IRAs and wilderness study areas should be obliterated and revegetated, with closures policed and enforced.

#### **Invasive Plants/Noxious Weeds**

15. We are pleased that the DEIS includes discussion of travel management impacts on the spread of invasive plants and noxious weeds (pages 252-265). Noxious weeds are a great threat to biodiversity. Weeds can out-compete native plants and produce a monoculture that has little or

no plant species diversity or benefit to wildlife. Noxious weeds tend to gain a foothold where there is disturbance in the ecosystem, such as road/trail construction and where off-road vehicles disturb soils.

The DEIS states that approximately 25,514 acres of mapped noxious weed infestations occur within the Blackfoot travel planning area with 12,435 acres of weed infestations within 100 feet of open or closed roads and trails, and 4,755 acres of weed infestations along motorized routes (and only 47 acres along non-motorized routes (page 252).

EPA supports the need to minimize noxious weed infestations. Motorized uses are a major contributor to the spread of weeds. In fact, we believe motorized vehicles—cars, trucks, ATVs, motorcycles, may be the greatest vector for spread of weeds. This is borne out by the statement in the DEIS (page 253), stating that roads have high weed infestations since vehicles carry weed seeds which are dispersed along travelways; roads are disturbed by maintenance activities on a regular basis providing a ready seedbed for weed seeds; and human use is concentrated along roadsides which increases the exposure of these areas to noxious weed seed dispersal and ground disturbance. We note that a single vehicle driven several feet through a knapweed site can acquire up to 2,000 seeds, 200 of which may still be attached after 10 miles of driving (Montana Knapweeds: Identification, Biology and Management, MSU Extension Service.)

An effective noxious weed control program should include restrictions on motorized uses, particularly off-road uses. Off-road vehicles are designed to, and do, travel off-trail, disturbing soil, creating weed seedbeds, and dispersing seeds widely. Weed seed dispersal from non-motorized travel is of lesser concern because of fewer places to collect/transport seed, and the dispersal rate and distances along trails are less. Table 6 comparing alternatives (page 44) indicates that Alternative 3 is the least likely alternative to promote the introduction, establishment and spread of invasive species/noxious weeds. For your information, measures we often recommend for preventing spread from source areas to uninfested areas include:

- Ensure that equipment tracks and tires are cleaned prior to transportation to an uninfested site.
- < Focus weed control efforts at trail heads and transportation corridors to prevent tracking of seed into uninfested areas.
- Attempt to control the spread from one watershed to another to reduce water as a transport vector.
- < If a localized infestation exists and control is not a viable option, consider rerouting trails/roads around the infestation to reduce available vectors for spread.
- < Establish an education program for industrial and recreational users and encourage voluntary assistance in both prevention and control activities.</p>
- < Reseed disturbed sites as soon as possible following disturbance.

# Wildlife/Threatened & Endangered Species

16. The DEIS states that forest roads and overall road density have the potential to affect the quality of wildlife habitat, including habitat security for wildlife, wildlife dispersal and travel, including species such as the threatened grizzly bear (page 142). Roads and motorized uses increase wildlife encounters with humans which can result in habitat degradation, displacement, increased wildlife mortality, changes in behavior, increased stress, and reduction of reproductive success. We appreciate the DEIS discussion of road effects on wildlife (pages 150-153).

We support adequate limitations on motorized travel and open motorized road and trail density for protection of wildlife habitat and security, and key corridors for wildlife migration. The Travel Plan should avoid and minimize adverse impacts upon species of special concern, and contribute to recovery of listed species, and maintain and protect high quality wildlife habitat and linkage corridors for productive and diverse populations of wildlife species (species viability). Wildlife connectivity and security should be maintained or improved and wildlife fragmentation and displacement from roads and motorized uses reduced.

We are pleased that the DEIS recognizes that controlling and directing motorized access is one of the most important tools in achieving habitat effectiveness and managing recovery of the threatened grizzly bear (page 153). The DEIS states that Alternative 3 results in the greatest reduction of open road densities, providing greater benefit to those species sensitive to road densities (page 198); and that implementation of the proposed activities in Alternatives 2 and 3 "may affect, but are not likely to adversely affect" the grizzly bear or its habitat (page 202). The DEIS also states that all alternatives "may affect, but are not likely to adversely affect" the threatened Canada lynx or lynx critical habitat (page 214), but also states that Alternative 3 has the least potential to affect the threatened Canada lynx or the functionality of lynx critical habitat due to the fewest miles of open routes and the most seasonally restricted routes.

Accordingly, Alternative 3 appears to best address wildlife and T&E species concerns associated with roads and motorized uses. We recommend that the final EIS and Record of Decision include documentation of U.S. Fish & Wildlife Service's concurrence with the biological assessment upon listed species. If the consultation process is treated as a separate process, the Agencies risk USFWS identification of significant impacts, perhaps additional mitigation measures, or changes to the preferred alternative.

#### Monitoring

17. There should be an effective program for monitoring, evaluation and adaptive management to assure that effects of travel management are identified and management modified where necessary to reduce adverse effects. As noted in earlier comments, we are concerned about effects of roads/trails and motorized uses on water quality, aquatic habitat and fisheries, as well as other resources such as wildlife habitat, weeds and sensitive plants. Given the acknowledged impact of roads/trails and motorized uses use on water quality and fisheries and other resources such as wildlife, weeds, sensitive plants, etc., it is important to monitor effects of travel and public recreation on these resources, and identify problems or undesirable or unexpected results or conditions, so they can be mitigated. It is through the iterative process of setting goals and objectives, planning and carrying out travel management, monitoring impacts of travel management, and feeding back monitoring results to managers so they can understand effects and make needed adjustments to mitigate effects, that adaptive management works.

We did not see much discussion of Blackfoot Travel Plan monitoring in the DEIS in regard to identifying effects of Plan implementation, particularly use of designated motorized routes to assess effects and problems. We recommend that the FEIS provide additional disclosure in regard to potential outcomes related to monitoring of travel management. For example, stating that roads or trails will be closed if monitoring shows that motor vehicle use is causing or will cause considerable adverse effects on public safety or water quality, fish habitat, soil, vegetation, wildlife, wildlife habitat, or cultural or historic resources.

We also recommend that mechanisms for public disclosure of the monitoring analysis and the decisions for the Travel Plan be provided. The roles of the Forest Service, other Agencies, independent science, and the public in monitoring should be identified. The FEIS should discuss the future decision points in the adaptive management process that may require additional NEPA analysis. The FEIS should also discuss resources and funding availability for monitoring and adaptive management in regard to effects of travel. We are concerned about adequacy of resources for monitoring, since monitoring is often inadequately funded.

# U.S. Environmental Protection Agency Rating System for Draft Environmental Impact Statements

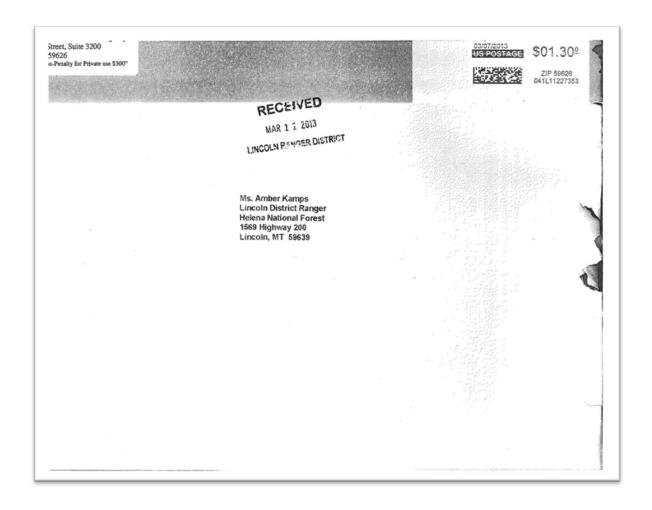
# **Definitions and Follow-Up Action\***

#### **Environmental Impact of the Action**

- LO - Lack of Objections: The Environmental Protection Agency (EPA) review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.
- EC - Environmental Concerns: The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce these impacts.
- EO - Environmental Objections: The EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no-action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.
- EU -- Environmentally Unsatisfactory: The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

#### Adequacy of the Impact Statement

- Category 1 - Adequate: EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis of data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.
- Category 2 - Insufficient Information: The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses or discussion should be included in the final EIS.
- Category 3 - Inadequate: EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the National Environmental Policy Act and or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.
- \* From EPA Manual 1640 Policy and Procedures for the Review of Federal Actions Impacting the Environment. February, 1987.



Kamos, Amber -FS; ES-comments-northern-helena-lincoln Blackfoot Travel Plan Comments Monday, March 11, 2013 3:28:56 PM 089-13-Helena NF--Blackfoot Trav Plan sum-fall--DEIS.docx To: Subject:

Date:

Attachments:

Dear Ms. Kamps,

Attached is the comment letter from MFWP regarding the Blackfoot Travel Plan. A signed hard copy of this letter will follow. MFWP appreciates the opportunity to comment on this travel plan and hopes that our input helps protect and improve the fish, wildlife and recreational resources in this area of Montana.

If you have any questions, please give me a call or send an email.

Thanks,

**Rob Brooks** Strategic Planning and Data Services Bureau Montana Fish, Wildlife and Parks robrooks@mt.gov 406-444-5786



1420 East 6<sup>th</sup> Avenue PO Box 200701 Helena, MT 59620-0701 406-444-3186 Ref:DO089-13 March 11, 2013

Helena National Forest Attn: Blackfoot Travel Plan 2880 Skyway Drive Helena, MT 59602

Reference: Blackfoot Travel Plan--Draft Environmental Impact Statement (designating

motorized and non-motorized routes for non-winter travel on the Lincoln Ranger

District of the Helena National Forest)

#### Dear Helena National Forest:

Montana Fish, Wildlife and Parks (FWP) has been actively engaged in the development of a revision of the Helena National Forest (HNF) Blackfoot Non-Winter Travel Plan for over 5 years. Agency staffs from a variety of disciplines have attended numerous meetings with the Forest Service and stakeholders, have consistently offered substantive comments during scoping, and have thoroughly reviewed this current Draft Environmental Impact Statement (DEIS) for the proposed travel plan (hereafter, Plan). FWP strongly recommends adoption of Alternative 3 with the exceptions and refinements described in the following letter.

The US Fish & Wildlife Service (USFWS) National Survey estimated that 950,000 persons (resident and nonresident) participated in wildlife-associated recreation in Montana in 2006—this recreation included 291,000 anglers, 197,000 hunters, and 755,000 wildlife watchers (USDI and USDC 2006). Estimated expenditures were \$226 million for anglers, \$311 million for hunters, and \$376 million for wildlife watchers. Clearly, our wildlife is an important driver of Montana's economy—it's why many folks live in and visit Montana. FWP believes Alternative 3 (with limited exceptions) would be the best of the HNF's 2 action alternatives because—compared to Alternative 2—Alternative 3 would better and more sufficiently protect and improve habitat for important game species, terrestrial wildlife species of concern, and regionally significant populations of native trout. This alternative would also remove redundant and unnecessary roads while providing additional wheeled motorized access and recreational opportunities in places where, and at times when, motorized access is compatible with other important Forest resource values.

### COMMENT ORGANIZATION

The Blackfoot Travel Plan (Lincoln Ranger District) covers portions of 3 FWP Regions. The majority of the Plan's area is in FWP Region 2 (west of the Continental Divide, headquartered in Missoula), with smaller portions east of the Divide in Regions 3 (Bozeman) and 4 (Great Falls). Our comments are

HNF - Blackfoot Trav el Plan - DEIS Ref: DO089-13 March 11, 2013 Page 1 of 15 organized in the following order: FWP REGION 2, FWP REGION 3, and the PARKS DIVISION. (We note that "recreation" is a broad concept with many types of nonmotorized and motorized categories and an even broader range of types of activities that recreationists pursue in the HNF; therefore, recreational comments can be found within all of the 3 main categories of our letter.)

#### FWP REGION 2

In particular, FWP supports Alternative 3's formal designation of the Helmville-Gould and most of the Continental Divide trails (CDT) as non-motorized. FWP also supports the proposed 9/1 (September 1) seasonal closure of motorized routes in the Stonewall Lookout area. Motorized use of the Helmville-Gould Trail and CDT has been controversial for years--strong arguments can and have been made that they never should have been open to motorized use to begin with. Their designation as non-motorized trails would strategically increase secure habitat within an important grizzly bear Biological Activity Center and would help ensure functional connectivity between the Northern Continental Divide Ecosystem (NCDE) and expanding subpopulations of grizzly bears further south. Designating just these two trails as non-motorized would also dramatically increase elk habitat effectiveness and security in herd units where these values may be limiting. Enacting these important changes makes it possible for us to support the development of, and expected increase in, summer motorized recreation in other areas of the Plan Area where that activity is more appropriate.

In addition to the specific recommendations below, FWP is concerned that Road U-066 above Patterson Prairie is proposed to be opened to year-round motorized ("highway legal vehicles") access under Alternative 3, where it is proposed to remain closed under both the No-action Alternative and Alternative 2. This area is used extensively by grizzly bears (FWP researchers have captured at least two bears on the closed road in recent years), and opening Road 066 would reduce big-game security in an area where such secure habitat is limited. We found no rationale in the DEIS explaining why this particular road should be opened to motorized use. Therefore, unless there are compelling resource issues requiring the road be open, FWP recommends it remain closed.

#### Elk

Annual aerial surveys of elk in deer/elk hunting district (HD) 281 north of Highway 200 are used to evaluate elk population status in that HD as well as adjacent HDs 284 and 280. Although total elk numbers are currently within objective in HD 281 (not "above", as stated in the DEIS), bull survival (a 3-year average of 9 bulls:100 cows observed in spring) has consistently been well below the objective of 15 bulls:100 cows described in the Montana Final Elk Management Plan (MFWP 2004).

Annual aerial surveys are also conducted in HD 293 south of Highway 200. Elk numbers are significantly, and chronically, below FWP objective in this hunting district (contrary to assertions in the DEIS, e.g., p. 236). Declines have been most pronounced in the northern portion of the HD that includes this Plan area. The 5-year average bull:100 cow ratio (11:100 cows) is only slightly above the HD's minimum objective of 10:100 cows.

In managed landscapes, open motorized route density and arrangement during the fall hunting season most strongly affects bull survival. Inadequate secure public land habitat may also cause elk to increase use of nearby private lands that provide only little or no public hunting opportunity.

The HNF is proposing to change elk security Standard (4a) by which elk security is measured and provided for within the Blackfoot Travel Plan area. FWP is currently evaluating the proposed change and

HNF – Blackfoot Travel Plan DEIS Ref:DO89-12 March 11, 2013 Page 2 of 15 will separately provide detailed input during that proposal's public comment period. In general, however, any analysis of elk vulnerability and habitat security must take into account all routes open to any public or administrative motorized use during any portion of the fall hunting season, defined as the period between 9/1 and 12/1 each year. Similarly, analyses of summer habitat effectiveness should consider the period between 5/16 and 8/31. Seasonal road closures should correspond to these dates and should be consistently adopted throughout the Plan area.

Implementation of Alternative 3 (with noted exceptions) would provide the greatest benefit to elk herd units that rely on public land within the Plan area. Habitat effectiveness outside of the hunting season would be greater than under Alternative 2 and, more importantly, elk security would be significantly increased due to permanent and seasonal motorized route closures during the fall hunting seasons. FWP expects that implementation of Alternative 3 would increase bull survival on the Travel Plan area and help affected herds achieve or maintain FWP bull-ratio objectives going forward.

#### Mountain Goat

FWP strongly supports the proposal under Alternative 3 to seasonally restrict motorized use of Route 417 leading to Stonewall Lookout and to obliterate Trail U330-B1 leading from the Lookout, in order to reduce disturbance to the resident goat herd, especially during the pre-winter period. We disagree that limiting off-highway vehicle (OHV) access to the Lookout during fall would also increase the risk of illegal goat harvest, but agree that restricting similar motorized access to the head of Copper Creek would decrease the risk of illegal harvest there (p. 249). We support the conversion of Trails 485 and 771-A3 to non-motorized trails.

#### Grizzly Bear1

The portions of the Travel Plan area north of Highway 200 are within NCDE Grizzly Bear Recovery Zone and are part of the Monture-Landers Fork Bear Management Unit (BMU). Helena National Forest lands within this BMU are composed of the Arrastra Creek, Red Mountain, and Alice Creek subunits and are essential to grizzly bear recovery within the NCDE. The lands in this area should continue to be managed to maintain habitat components vital to the long-term survival of the species. Given this management directive, Alternative 3 is clearly the best approach to managing grizzlies in this portion of the HNF.

Travel Plan lands south of Highway 200 have been re-colonized by grizzly bears and the mountain-ridge systems and drainages along this portion of the Continental Divide offer both high quality habitat and habitat connectivity allowing dispersal to southern HNF lands. In the last 10 years FWP and other agencies have verified multiple grizzly bear occurrences and mortalities as far south as Butte, Anaconda and Deer Lodge. Grizzly bear activity is increasing each year on the Lincoln Ranger District south of Highway 200; Alternative 3 is clearly the most appropriate Travel Plan alternative to benefit grizzlies occupying these lands outside of the designated Recovery Zone.

#### Specifics

The DEIS is in error when it states there are no grizzly bear Biological Activity Centers (BACs) south of Highway 200. It was noted in Chapter 3 (p. 156) that grizzlies are expanding with numerous occurrences documented south of Highway 200 but then states that "there are no known grizzly bear BAC" south of the highway. Appendix E of the Helena National Forest Plan (1986) provides direction for grizzly bear

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<sup>&</sup>lt;sup>1</sup> Some of this discussion includes areas west of the Continental Divide in FWP's Regions 3 and 4.

management outside of the Recovery Zone. It states that a BAC is an area with 10 years of verified grizzly bear activity with verified family group activity for 5 of those years. One area outside of the Grizzly Bear Recovery Zone south of Highway 200 currently meets these explicit criteria. The Ogden/Dalton Mountain Complex (including upper Nevada Creek) has been used consistently by several radio-collared grizzly bears since at least 2002. FWP has monitored 3 radio-collared grizzly bears (1 adult male and 2 females that have each had a least 1 litter). These bears annually use habitat within the drainages north and south of the ridgeline connecting and flowing from Ogden and Dalton Mountains. All 3 of these bears (including family groups) and other unmarked grizzlies have been documented spending considerable amounts of time utilizing these habitats south of Highway 200. In addition, 1 of the collared females successfully denned and birthed cubs on Ogden Mountain in 2010.

Grizzly bear activity is now occurring throughout HNF lands between the Blackfoot, Little Blackfoot and Prickly Pear watersheds. As a result, FWP recommends that the HNF implement best management practices for BAC management throughout the areas encompassed by the Blackfoot Travel Plan. For both action alternatives (Alt. 2 and 3), open-route and total-route density targets should be strictly adhered to within the US Fish and Wildlife Service (USFWS) Grizzly Bear Recovery Zone, and these densities should also be aspired to within HNF ownerships outside of the Recovery Zone one that are south of Highway 200.

Much more of the southern Lincoln Ranger District will qualify as a BAC in the near future. In the last 10 years FWP, US Forest Service (USFS) biologists, and the US Department of Agriculture's Wildlife Services (USDAWS) have verified grizzly activity throughout the southern portion of the Plan area. For example, south and east of the Continental Divide reports and sighting by agency personnel have increased:

- In 1996 and 1997 a radio-collared female grizzly was located on 3 occasions in the South Fork of the Dearborn River. Between 2000 and 2003, grizzly bear family groups were observed by USFS personnel on several occasions in Dark Gulch. In 2003 an unknown collared grizzly was filmed by USDAWS on a private ranch near Sieben (between Helena and Wolf Creek). In 2007 a sighting of a female grizzly with cubs was verified by USDAWS in Clark Creek south of Sieben. In 2008 a male grizzly was trapped by USDAWS in Wolf Creek. In the summer 2010 a radio-collared grizzly bear traveled south from the Seeley/Swan area to Avon, then to Marysville west of the Divide, and back north and east through the HNF to Lincoln before swinging back to Seeley Lake. In 2010 an unmarked grizzly was photographed at Mitchell Mountain by USDAWS during a helicopter flight. And in 2012, USDAWS set traps for a grizzly at a depredation in Little Prickly Pear Creek.
- Grizzly bears have also been consistently observed along the southwest portions of the HNF across the Avon Valley between Nevada Creek and the Little Blackfoot River basins. Between 1998 and 2002 USDAWS responded to multiple depredations by grizzly bear on domestic sheep (grizzly bear family groups and lone bears) near Nevada Lake. In 2001 a radio-collared grizzly's "cut collar" was discovered in Washington Gulch. In 2003 a sub-adult male grizzly was captured near Nevada Lake. Between 2008 and 2011, unmarked grizzlies were photographed in the Nevada Creek drainage, Threemile Creek, and along the Little Blackfoot River between Elliston and Avon. In 2011 USDAWS responded to grizzly bear depredations in Snowshoe Creek.

The Blackfoot Travel Plan area is exceedingly important to recovering grizzly bear populations in the southern NCDE. Grizzlies are sensitive to vehicular disturbance and road densities. Under both Alternatives 2 and 3, there are proposed motorized trails proposed for both sides of Highway 200. It should be noted again that roads open to Off-Highway Vehicles (OHVs, including 3- and 4-wheeled

HNF – Blackfoot Travel Plan DEIS Ref:DO89-12 March 11, 2013 Page 4 of 15 ATVs and motorbikes) have similar impacts to sensitive wildlife species as do roads open to motorized highway legal traffic. Disturbance from OHVs may exceed that of other vehicles because they enable access to more remote areas, noise is greater, and vehicle speeds are generally higher. Forest roads open to highway vehicles also provide opportunity for OHV recreation, but dedicated OHV trails create additive disturbance.

The Rogers Pass/Continental Divide Corridor from Red Mountain to Flesher Pass is an important movement and dispersal zone for a variety of wildlife species including lynx, wolverine, and grizzly bear. FWP is pleased that this portion of the Continental Divide Trail (and some of the existing spur roads), under Alternatives 2 and 3, would be designated non-motorized in order to limit disturbance to wildlife and ensure the continued function of this important corridor. However, grizzly bears and other wildlife inhabiting or dispersing through this portion of the Continental Divide are still vulnerable as a result of the constriction of forest lands at this section of the HNF. This is one of the few spots in the Blackfoot watershed where forest lands provide direct connectivity between the NCDE and HNF lands south of Highway 200. Private lands on the east and west side of the Divide at Rogers Pass are only one mile apart at the HNF's narrowest point at Cadotte Pass. This stretch of uninterrupted forest land is, arguably, one of the most important wildlife corridors in the Crown of the Continent. FWPs question the wisdom of developing motorized trail systems on either side of the Highway 200 in this area.

The Bartlett Creek area north of Highway 200 is part of the Alice Creek bear management subunit within the Grizzly Bear Recovery Zone. Development of additional motorized recreation area in Bartlett Creek would impact grizzlies more seriously than routes in the Mike Horse area because of the latter's long history as a mining district, checkerboard ownership, and the fact that the drainage's northern aspect and heavier timber offers more security and hiding cover for wildlife. The existing road system in Bartlett Creek is currently closed to motorized travel, and grizzly bears are known to use the area extensively in the spring, summer, and fall for biscuit root and pine nut foraging. FWP does not recommend any new road construction or motorized trail designation on these (HNF's) recently acquired lands from Plum Creek Timber Company in and around the First Gulch, Bartlett Creek, and Cadotte Creek areas. FWP encourages the HNF to reroute this portion of motorized trail expansion to a trail near or adjacent to Highway 200.

The Mike Horse Creek motorized route would have less impact to grizzlies and other wildlife. FWP supports decommissioning the illegal motorized trails up Seven Up Pete Creek and developing the alternative motorized route between Hogum Creek and Stemple Pass--as long as the seasonal closures are enforced.

The proposed motorized route between the Black Mountain/Long Point road system, Lincoln Gulch and Beaver Creek is used by grizzly bears and other wildlife; FWP does not support its development unless fall closures are adopted and enforced. It is important that the Travel Plan be simple, consistent, and concise. It is also important that all 4 National Forests in and around the NCDE have similar summer travel management plans so as to avoid user confusion and to prevent the concentration of OHV use on one particular forest (adjacent forests largely limit wheeled OHV use to roads designated open for highway vehicle use).

The extent and potential impacts of the (nonmotorized) mountain bike trail systems proposed in both Alternatives 2 and 3 need to be more thoroughly described. FWP supports the enhancement of existing trails and roads to accommodate the use of bicycles, but does not support constructing new bike trails on the north slope of Black Mountain. Much of this area is within an inventoried roadless area, and we are concerned that development of a designated trail system would eventually lead to the need for more active management of the area. FWP is also concerned about constructing new bike trails along the south and north bench areas of Beaver Creek for the same reason and would prefer the trail use existing roads and

HNF – Blackfoot Travel Plan DEIS Ref:DO89-12 March 11, 2013 Page 5 of 15 trails. We also discourage any new trail construction along the ridge system between Baldy Mountain and Crater Mountain southeast of Lincoln.

FWP does not support opening Road 4106-J2 on the north side of what is known as Bull Mountain in the upper reaches of Dry Creek for year-round motorized use (as proposed in Alternative 2). At least 3 different grizzlies have denned just over the top of the ridge in the head of Ward Creek, approximately ¼-mile from where this road ends at the ridgeline.

#### Fisheries and Hydrology

The Lincoln Ranger District (LRD), located in the headwaters of the Blackfoot Basin, is critical to the long-term conservation of native trout in Montana because this area harbors genetically "pure" native westslope cutthroat trout in most tributaries, as well as Threatened bull trout in several streams. Given the high conservation value of this area's native trout, Alternative 3 is clearly the best Travel Plan alternative for the long-term recovery and security of native fisheries on the LRD. This determination is obvious given this Alternative's potential to: 1) reduce sediment delivery to streams, 2) restore aquatic and riparian function, and 3) remove or improve water control structures associated with roads. Alternative 2 would provide relatively minor benefits compared to Alternative 3.

Mitigating the biological impacts of roads is among the most challenging aspects of maintaining highquality native trout fisheries, both on and off the Forest. Road networks can directly alter hydrology, introduce sediment, and fragment habitat required for populations for native fisheries to persist at a landscape scale. Such impacts are clearly evident in FWP surveys on many waters on and off the HNF, and have been the focus of many years of ongoing remedial activities.

According to the DEIS about 197 miles of road would be decommissioned under Alternative 3 versus only 8 miles under Alternative 2 and none under Alternative 1. In addition, Alternative 3 would close about 566 miles of unauthorized roads and trails, reduce instream sediment by 38 tons per year (versus only 13 under Alternative 2), and would remove 121 culverts (versus only 17 under Alternative 2). Alternative 3 offers a rare opportunity to meaningfully reduce sediment Total Maximum Daily Load (TMDL) at a landscape scale and improve fisheries and other aquatic resources on the Lincoln Ranger District.

FWP suggests sediment-reducing projects (including road decommissioning) should focus on TMDL sediment-impaired streams (DEIS, p. 65), while also emphasizing priority streams supporting pure native trout (Pierce et al. 2005), especially bull trout. Such priority streams surround the broader Lincoln Valley and include Alice Creek, Arrastra Creek, Beaver Creek, Anaconda Creek, Willow Creeks, Poorman Creek, Sauerkraut Creek and the upper Blackfoot River.

FWP supports the decommissioning of crossings (e.g., p. 76) and/or replacement of undersized culverts using "stream simulation" concepts as developed by USFS hydrologists. The removal or improvement of road crossings should be a priority under the Travel Plan and could be coordinated with other ongoing collaborative efforts that are currently attempting to improve fisheries in priority streams that drain the National Forest. Tributaries to upper Nevada Creek, while important, are often hybridized with rainbow trout, providing relatively little biological benefit to the Blackfoot compare to those in the Lincoln Valley.

In addition to the above general comments, it may be that the 150-foot riparian buffer provides adequate protections for most streams associated with new roads as mentioned in the DEIS. However in sensitive riparian areas that support native trout communities, the 300-foot (INFISH) riparian buffer should also be

HNF – Blackfoot Travel Plan DEIS Ref:DO89-12 March 11, 2013 Page 6 of 15 applied where appropriate. These might include bull trout streams, streams in alluvial valley bottoms, or streams with elevated (e.g., TMDL) levels of instream sediment.

#### FWP REGION 3

#### **General Comments**

FWP Region 3 offers the following comments (1-11) as background information and partial rationale for some of our recommendations (i-xv), which are farther below.

The area along the Continental Divide (CD) is important for wildlife. The CD functions as a
wildlife movement corridor and provides habitat and habitat connectivity. This area is especially
important for species such as wolverine, lynx, and grizzly bear.

Grizzly bear are sensitive to vehicular disturbance and road densities. FWP expects that grizzly bear continue to recolonize areas to the south of the recovery zone. Further, FWP expects that grizzly bear are not only occupying habitats along the CD but are also utilizing the CD corridor to move to other areas. Documentation includes the following:

- An adult grizzly was documented in the upper Boulder River area in spring 2012, and another sighting was documented in the Four Corners/Lockhart Meadow area along the CD in spring 2011.
- In 2010, a male grizzly bear was killed in Elk Park, and through genetic testing it was
  determined that this bear was from Glacier National Park.
- In 2006, an adult male grizzly from the NCDE was poached on the Mount Hagan Wildlife Management Area south of Anaconda.
- In 1980, a black bear hunter illegally harvested an adult male grizzly near Garrison Junction.

There have been numerous wolverine sightings on private land adjacent to the HNF near Flesher Pass, and wolverine and lynx have been confirmed as far south as Jericho Mountain and Basin Creek.

FWP would support your efforts to conserve this important movement corridor and habitat connectivity along the CD, and therefore FWP supports decommissioning the following routes as proposed under Alternative 3:

- 4087
- 4088, 4088-A1, 4088-A2
- 1827-J3
- 1840, 1840-B1
- 1825-A1
- 1819, 1819-A1, 1819-B1, 1819-C1 (presumably "C1"; it was labeled on the scoping maps but not on the DEIS maps), 1819-D1
- 1827 in sections 24, 25 and 26; 1827-F1, 1827-G1, 1827-H1, 1827-H2 and 2 unlabeled spurs in the same area
- U4133, U4133A, U4133B and 2 unlabeled routes in the area

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- 4089, U-4089
- U-052
- U-053
- U-054
- U-4133, U-4133A, U-4133B and 2 unlabeled routes in sections 23 and 26
- Unidentified spur in T13N R07W S35

Further, FWP supports yearlong closure and "storage" of the following routes as proposed under both Alternative 2 and 3.

- 1827-I1
- 1827-C1
- 1006-A1
- 601-L3
- 4133, 4133-A1; 4133-A1 is a dead-end spur off the CD nonmotorized trail (as proposed under Alternative 3)
- 601-N2, 601-N5 and unlabeled spurs
- 601-L1, 601-M1
- 601-L3
- 1827-K1

FWP supports designation of Route 440, which follows the crest of the CD, passes through roadless areas and is a section of the CD National Scenic Trail, as non-motorized under Alternative 3. Therefore, we also support decommissioning of motorized Routes 1840-B1 and 1825-A1, which overlap Route 440 under the existing condition.

- 2. Due to the epidemic bug-kill across the HNF, the condition of the Forest will be vastly different in the not too distant future. This presents obvious management challenges for the HNF as a land manager and FWP as managers of Montana's fish and wildlife populations. This will directly impact security cover, hiding cover, and thermal cover. We are particularly concerned with the reality that many ellk herd units are below standards for security and thermal cover and that conditions may decline after the implementation of the HNF's recent Forest-wide Hazardous Tree Removal and Fuels Reduction Project. FWP would like to know, how much of the Hazard Tree Project been implemented, and where do the elk herd units stand in comparison with respect to the standard post-treatment?
- 3. FWP is at present coordinating with the Lincoln Ranger District biologist to develop accurate elk herd unit boundaries east of the CD. The boundaries of the elk herd units east of the CD as presented in the DEIS do not incorporate elk herd use areas year-round, during winter, or during fall. To our knowledge, the boundary of the existing "elk herd units" east of the CD were not generated with input from FWP biologist(s) for any of the iterations listed in the DEIS (2003, 2004 or 2011). The recommendations from the joint FWP-USFS Working Group for this new habitat security model/standard included an analysis area that captured elk herd use during: 1) the fall, or 2) year round if fall-use areas were not able to be determined with current data and information, or 3) watershed if it was not possible to determine either fall- or winter-use areas. FWP strongly disagrees with the boundaries as they are presented in the DEIS, because FWP has

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<sup>&</sup>lt;sup>2</sup> In the HNF scoping document and DEIS, "the 'storage' classification would count as an effective closure [to motorized use] only if the first ¼ mile of the road was ripped and berms put in place."

documented extensive and continual elk habitat use far from the Forest Service boundary during both fall and winter. A much broader area must be incorporated into the existing elk herd units to capture year-round and/or fall use areas of elk. With this updated information, FWP will be able to evaluate the proposed big game security amendment, how the three alternatives will, or will not, provide adequate security cover, as well as hiding cover and thermal cover, and the Travel Plan as a whole. FWP appreciates that the HNF is trying to establish a better metric for big game security, because during scoping for this Travel Plan FWP asked what long term plans the HNF had for bringing the Forest into compliance with big game standards, and more specifically, asked how this Travel Plan would assess and address big game security standards. However, FWP needs the opportunity to review an analysis that utilizes elk herd unit boundaries that reflect elk herd use either year round or during fall. Changing the big game security standard to come into compliance is not sufficient in and of itself; the standard must adequately conserve secure habitat.

- 4. It is appropriate to have varying seasonal closure dates with respect to resource management, not only to prevent soil disturbance and erosion in the spring or in wetland areas but also to meet a variety of wildlife requirements at different times of the year and to increase recreational enjoyment of the resources. While your travel planning objectives include simplification, FWP would be concerned about creating seasonal closures that may be too broad or ineffective at meeting wildlife requirements.
- On the existing condition map distributed with the DEIS, Route 1819 was identified as an Open Highway Legal Vehicles route, but it is not legally accessible for the public from any other motorized route. FWP fully supports decommissioning of the following routes as proposed under Alternative 3.
  - 1819, 1819-A1, 1819-B1, 1819-C1 (presumably, it was labeled on the scoping maps but not on the DEIS maps), 1819-D1
- 6. FWP supports decommissioning the following redundant and non-arterial routes and dead-end spurs to improve wildlife security as well as the integrity of the CD wildlife corridor under Alternative 3:
  - 1827 in sections 24, 25 and 26; 1827-F1, 1827-G1, 1827-H1, 1827-H2 and 2 unlabeled spurs in the same area
  - Ú4133, U4133A, U4133B and 2 unlabeled routes in the area
  - · U-057, a private-land only connector
  - 1840, 1840-B1
  - 1825-A1
- 7. FWP supports managing roadless areas (RAs) as both roadless and non-motorized. "Non-motorized" should exclude all motorized vehicles, including snowmobiles and over-snow vehicles. FWP would support the HNF's decision to decommission the following motorized routes within and adjacent to RAs under Alternative 3:
  - 4089 and U-4089
  - U-051
  - U-052
  - U-1815
  - 1828, 1828-A1, 1828-B and additional unlabeled spurs in T14 NR07W S31 and 32

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- 4088, 4088-A1 and 4088-A2; these routes have already been naturally reclaimed, and FWP is pleased to see the Forest Service take them off the travel system under Alternative 3.
- 8. FWP supports the HNF intent to exclude "unauthorized"/user-created routes that have been identified to date, as well as those that may be created or discovered in the future, from the forest transportation system. FWP would prefer that unauthorized routes not be incorporated into the forest transportation system; FWP thinks that incorporating such routes will send a message to the public, including landowners in the area, that this is an acceptable practice. Over 156 miles of unauthorized routes were identified on the Lincoln Ranger District throughout this travel planning process. If unauthorized routes are incorporated into the forest transportation system in the Record of Decision, FWP would be interested to know what that decision for each route was based upon.

Route U-1827 is proposed as a non-motorized trail, the lower end of which connects directly to private land. However, it is also proposed under both Alternative 2 and 3 that a motorized trail, U-New-1006, be constructed to the end of U-1827 on public land. FWP recommends that U-1827 be obliterated. If that is not possible, then FWP recommends that Route U-New-1006, which is about 1/3-mile in length, be non-motorized instead of motorized. FWP makes this recommendation because we are aware of continued and increasing illegal motorized use in this problem area, which has not been enforced by the HNF.

Route U-1884 is less than ¼ mile in length and is proposed as a Motorized Highway Legal Vehicle route, currently designated as a motorized trail, to a parcel of private land under both Alternative 2 and 3. FWP recommends that the route remain a motorized trail if possible.

FWP would support the HNF's decision to decommission the following unauthorized routes under Alternative 3, which link directly to the CD. Decommissioning will improve habitat security and the integrity of the CD wildlife movement corridor.

- U-053
- U-054
- 9. The unlabeled orange-yellow route in T12N R07W S9 on the east side of the divide has the same designation as the existing condition. Was there some other change intended for this route?
- 10. FWP supports the HNF's yearlong closure and "storage" of the following routes as proposed under both Alternative 2 and 3. FWP thinks that obliteration will be necessary at the entrance to reduce illegal motorized use in this problem area.
  - 1827-I1
  - 1827-C1
  - 1006-A1
  - · 601-L3, connects private lands parcels only

#### RECOMMENDATIONS

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<sup>&</sup>lt;sup>3</sup> In the HNF scoping document and DEIS, "the 'storage' classification would count as an effective closure [to motorized use] only if the first ½ mile of the road was ripped and berms put in place."

- Open-route and total-route density targets designated for the grizzly bear recovery zone should be aspired to within HNF ownerships outside of the recovery zone, south of Highway 200.
- iii. In the HNF Scoping Document and DEIS, HNF acknowledges that gates do not constitute 'effective closures' for motorized access—however, "storage" south of Highway 200 would use gates under either Alternative 2 or 3. FWP recommends that the "storage" policy proposed for routes north of Highway 200, which includes ripping the first ¼ mile of road and putting in berms, be implemented for routes south of Highway 200 as well. FWP thinks that this will be necessary to curb illegal motorized use, especially in areas where we are observing a continuing and increasing problem and lack of enforcement by the HNF, such as the Stemple Pass Road area east of the CD.
- iii. Arterial routes should be capitalized on for dual use by both legal highway vehicles and OHVs. Roads open to Off-Highway Vehicles (OHVs, including 3- and 4-wheeled ATVs, UTVs, and motorbikes) have similar impacts to sensitive wildlife species as those open to general vehicular traffic. Disturbance from OHVs may exceed that of other vehicles when they enable access to more remote areas, noise is greater, and vehicle speeds are generally higher. It should be recognized that forest roads open to highway vehicles also provide opportunity for OHV recreation. Dedicated OHV trails are additive to that opportunity and disturbance.
- iv. FWP recommends that redundant and non-arterial routes and dead-end spurs be closed yearlong, remain closed yearlong, be put into "storage", or be decommissioned to maintain or improve wildlife security. Grizzly bear activity in the area continues to increase, and reducing the extensive motorized routes in this landscape will be key to providing functional habitat for them. FWP recommends decommissioning of the following routes, which are slated for storage with a gate at present under both Alternative 2 and 3.
  - 1881-A1, slated for closure under both alternatives, a dead-end spur about 1/3-mile in length that parallels an Open Highway Legal Vehicle route in a problem area for illegal motorized use
  - 601-N2, 601-N5 and unlabeled spurs; all 1/3-mile or shorter length and parallel to Open Highway Legal Vehicle Routes
  - 601-L1, 601-M1; redundant, already private land access from different point off Open Highway Legal Vehicle route; 601-L1 comes off CD
  - 601-L3, redundant, other access to private land, private land connector only
  - 1827-K1, 1/3-mile long spur off CD non-motorized trail, dead ends
  - 1827-J2, dead-end, redundant route with three spurs that lead to the CD, and parallel to Open Highway Legal Vehicle Route

Further, FWP recommends reducing road density in T13N R07W at Granite Butte by closing dead-end spur routes and motorized trails. FWP supports closure for Granite Butte Routes 4133 and 4133-A1 and supports decommissioning of Routes U-4133, U-4133A, U-4133B and 2 unlabeled routes in sections 23 and 26. FWP would be supportive of the HNF's efforts to decommission redundant and non-arterial routes and dead-end spurs where priority allows and hopes the HNF will consider obliterating the entrance to 4133 if illegal motorized use continues to be a problem.

HNF - Blackfoot Travel Plan DEIS Ref:DO89-12 March 11, 2013 Page 11 of 15 Route 1827 is slated for closure in section 3 from September 1– June 30 under Alternative 3. This section of the route from Stemple Pass to its proposed closure in section 3 extends about 1.5 miles along the CD, and due to the switchbacks in section 3, is over 3 miles long. FWP thinks that leaving this route open through to section 3 is not beneficial to hunters and may be detrimental to their success given the route density because of the tight switch backs and because the route is nearly mirrored immediately west of the CD by Route 1841, which is slated as an Open Highway Legal Route under the existing condition and both Alternative 2 and 3. FWP recommends that Route 1827 be closed at Stemple Pass beginning on September 1. Additionally, this would help improve the wild character of the area immediately north of Stemple Pass Road compared to the more heavily roaded area immediately south of the Stemple Pass Road, thus providing for differing recreational hunting opportunities in the same vicinity.

- FWP would support formal designation of the CD trail as non-motorized through Specimen Creek RA, Roger's Pass Anaconda Hill RA, Lewis and Clark/Alice Creek RA, and the Nevada Mountain RA
- vi. In our 2009 and 2011 letters, FWP requested that motorized use be reduced in the vicinity of the CD to reduce impact on wildlife in the corridor. We continue to recommend reducing motorized use along the CD, and we support designation of Route 440, which follows the crest of the CD and passes through a roadless area, as non-motorized under Alternative 3.
- FWP recommends that adequate signing be placed at likely illegal motorized entry points to the Anaconda Hill RA along Route 1807.
- viii. In general, FWP supports decommissioning of roads and removal of stream crossings. An inventory of existing road crossings would allow prioritization of crossings in crucial habitats and identify culverts and/or crossings that disrupt connectivity within stream habitats. Crossings without appropriately sized culverts should be replaced with crossings adequate for fish passage and flushing flows, or the crossings should be removed completely.
- ix. Elements specifically listed in the Proposed Alternative that influence bull trout and/or westslope cutthroat trout species include moving Route 4134 on the South Fork of Poorman Creek and new construction on Route 1006 to Rooster Bill Gulch. Removal of multiple crossings on Route 4134 would benefit not only bull trout but all species present in the stream. Rooster Bill Gulch contains a Conservation Population of westslope cutthroat trout, and as a result, FWP recommends against constructing a new crossing of that stream and questions the necessity of a new road. Construction of a new road in the drainage could potentially further degrade cutthroat habitat through increased sedimentation and runoff from the new road. If a road crossing is constructed, it should be done in a manner to accommodate fish movement to avoid further fragmentation of the population; it is unclear from the Travel Plan documents whether stream crossing is planned.
- x. For wildlife security, FWP supports a uniform September 1 to June 30 closure period, which corresponds with the opening of some hunting seasons (e.g., deer and elk archery and fall black bear seasons), as proposed under Alternative 3 over the dual closure dates of September 1 and October 15 for different routes as proposed under Alternative 2. The September 1 closure date would then also be consistent with closure dates on the Lewis and Clark National Forest. FWP supports the September 1 June 30 closure for Route 1827 but recommends closure at Stemple Pass.

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- xi. April 1 is the date commonly accepted by land managers as the spring emergence date for grizzly bears in the Northern Continental Divide Ecosystem. FWP recommends at least an April 1 December 1 closure to snowmobile use. In the spring, our concerns include grizzly bear emergence and wolverine natal denning, and in the fall our concern is overland travel at higher elevations, or lower elevations in the event of early winters, and the impact that may have on wildlife security during some hunting seasons (e.g., deer and elk archery and fall black bear seasons).
- In general, FWP supports consistency in closure/opening dates across the HNF and with adjacent Forests, provided that resource concerns are met or exceeded.
- xiii. In the US Forest Service HNF Plan, Granite Butte is a proposed Research Natural Area (RNA). FWP supports reduction in motorized use in this area under Alternative 3, and FWP would be supportive of official RNA designation, because this is an important piece of the wildlife corridor.
- xiv. FWP supports the Forest Service's efforts to eliminating roads that provide exclusive access to private land or private landowners wherever possible.
- xv. FWP recommends that unauthorized routes be decommissioned.

#### PARKS DIVISION

Motorized recreation (primarily OHVs) has grown significantly in Montana since 2000. When Montana's permanent vehicle registration provisions went into effect in 2003, keeping accurate records and statistics on OHVs changed. The best information available today, however, indicates there are now 70,000+OHVs registered in Montana. This, along with the increasing nonresident OHV use in Montana, indicates that interest in motorized outdoor recreation in areas such as this will likely only increase over time.

Both Alternatives 2 and 3 maintain the traditional motorized recreational use that has developed in the area over the past two to three decades; however, Alternative 3 provides the best balance of protecting and improving the area's fish and wildlife resources and providing both motorized and non-motorized recreational use.

The following are some general but important points related to the proposed Travel Plan;

- The US Forest Service should prioritize and dedicate the necessary management resources to the
  project's implementation. This includes on-the-ground recreational management, education and
  enforcement efforts, weed control, and similar management activities which will be of benefit to
  the Travel Plan, the public, and the land base.
- The requirement of restricting motorized vehicles to designated routes only is appropriate and the backbone of the Travel Plan.
- There will be cases where it may be appropriate for OHV riders to utilize the US Forest Service
  roads as connector routes between designated motorized trail systems. Where and when this is
  appropriate, the Travel Plan should acknowledge these specific locations and thus designate the
  Forest Roads as such to allow legitimate OHV travel on them.

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- Loop trail systems are important for OHV riding opportunities. Whenever possible, trail loops should be planned so recreationalists have a place to ride to, a satisfying experience, and easily end up back where they began. Not only does this provide the outdoor recreational experience most riders' desire, but it likely reduces the likelihood that people will seek to create their own routes, find fault in the management decisions that created the loop system, and similar factors. Looped trail systems provide the opportunity for riders to do the right thing from the start.
- Where appropriate, connector trails between loop trail systems should be considered and
  implemented. It is one more way to plan and design a motorized trail system that users will
  respect and utilize. Defined connectors between existing road systems, the designated motorized
  trail loops in a specific area or drainage, the popular area campgrounds or camping areas--they
  are all important to recreationalists seeking a motorized outdoor experience in the area.
- Clear and concise route mapping is important. The information should convey the designated trail usage, vehicle width restrictions (single-track motorized vs. 50" width), any seasonal closures, and similar information.
- It will be important to provide appropriate signage, maintenance of signage, and improvements to
  the area signage as the new Travel Plan is implemented.

#### CONSULTATION

For further consultation or questions concerning FWP's comments, please feel free to contact Rob Brooks (phone 406-444-5786 at our office, <a href="mailto:robrooks@mt.gov">robrooks@mt.gov</a>) or the appropriate area personnel listed in the attached Consultation Details section (next page, with References Cited). Thank you for providing the opportunity for FWP to comment on this Travel Plan.

Sincerely,

M. Jeff Hagener Director

JH/sr

 Amber Kamps, Lincoln District Ranger, Helena National Forest Mack Long, Sharon Rose, Pat Flowers, Rob Brooks, Chas Van Genderen

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#### CONSULTATION DETAILS

For specific consultation regarding these Travel Plan comments, please feel free to contact the following FWP personnel:

#### Wildlife

West of the Divide: Blackfoot area wildlife biologist Jay Kolbe (phone 406-210-9830; jkolbe@mt.gov; PO Box 1288, Seeley Lake, MT 59868).

East of the Divide: Wildlife biologist Jenny Sika (phone 406-495-3268; jsika@mt.gov; PO Box 200701, Helena, MT 29620-0701).

#### Fisheries

Blackfoot area fisheries biologist Ron Pierce (phone 406-542-5532; <a href="mailto:rpierce@mt.gov">rpierce@mt.gov</a>; 3201 Spurgin Rd., Missoula, MT 59804).

#### Parks

Montana State Parks assistant administrator Tom Reilly (phone 406-444-3752; <a href="mailto:treilly@mt.gov">treilly@mt.gov</a>; PO Box 200701, Helena, MT 59620-0701).

## REFERENCES CITED

- MFWP (Montana Department of Fish, Wildlife and Parks). 2004. Montana statewide elk management plan. MFWP, Helena.
  <a href="http://fwp.mt.gov/fishAndWildlife/management/elk/managementPlan.html">http://fwp.mt.gov/fishAndWildlife/management/elk/managementPlan.html</a>. Accessed 3 March 2013.
- Pierce, R., R. Aasheim, and C. Podner. 2005. An integrated stream restoration and native fish conservation strategy for the Blackfoot River basin. Montana Department of Fish, Wildlife and Parks, Missoula.
- USDI (US Department of Interior, Fish and Wildlife Service) and USDC (US Department of Commerce, US Census Bureau). 2006. National Survey of Fishing, Hunting, and Wildlife-Associated Recreation.

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FS-comments-northern-helena-lincoln

Cc: Subject:

Kamps, Amber -FS Blackfoot Travel Plan DEIS - DOI Comments Date: Thursday, March 07, 2013 10:11:28 AM Attachments: Blackfoot Travel Plan DEIS - DOI Comments.odf

#### PLEASE ACKNOWLEDGE RECEIPT BY REPLY TO THIS MESSAGE

The Department of the Interior's comments on the subject document are attached.

If you require paper-copy or word-processor version, please so advise.

Robert F. Stewart

Regional Environmental Officer

Office of Environmental Policy and Compliance

U.S. Department of the Interior

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# United States Department of the Interior

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Office of Environmental Policy and Compliance
Denver Federal Center, Building 67, Room 118
Post Office Box 25007 (D-108)
Denver, Colorado 80225-0007



IN REPLY REFER TO

March 7, 2013

9043.1 ER 13/51

Kevin T. Riordan, Forest Supervisor Helena National Forest 2880 Skyway Drive Helena, MT 59602

RE: Draft Environmental Impact Statement (DEIS), Blackfoot Travel Plan, Lincoln Ranger District, Helena National Forest, Lewis and Clark and Powell Counties, MT

Dear Mr. Riordan:

The Department of the Interior has reviewed the subject document and offers the following comments for your consideration.

## Fish and Wildlife Resources

The U.S. Fish and Wildlife Service advises that their concerns will be addressed through the Endangered Species Act consultation process.

# Lewis and Clark National Historic Trail

The Lewis and Clark National Historic Trail (the Trail) is located within and proximate to the Blackfoot Travel Plan planning area. The Trail was established by Congress in an amendment to the National Trails System Act in 1978 [16 U.S.C. § 1244(a) (6)]. The National Park Service (NPS) administers the Trail and is charged under this Act with the identification and protection of the historic route, remnants, and artifacts of the Lewis and Clark Expedition (the Expedition) for public use and enjoyment. In addition, NPS has a responsibility under the Organic Act (16 U.S.C. §1, et seq.) to preserve unimpaired the scenery and the natural and cultural resources of the National Park System for the enjoyment, education, and inspiration of this and future generations.

Much of the Trail is outside Helena National Forest lands but still proximate to the planning area. The Trail does cross forest lands and the Alice Creek Historic District in the northeastern section of the planning area. As outlined in the Heritage Section of Chapter 3 of the DEIS, resources within the Alice Creek Historic District indicate the area has been a major travel corridor for at least 5,000 years. On the Expedition's return journey in July 1806, Lewis and nine men followed the Cokahlarishkit Trail eastward along the Blackfoot River and crossed the

Mr. Kevin T. Riordan, Forest Supervisor

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Continental Divide at a point today known as Lewis and Clark Pass. The Trail runs through a historic landscape that remains intact.

It appears that the roads south of the Alice Creek Historic District in Township 15 North Range 6 West were acquired by the United States Forest Service in 2009 or 2011, and closed. The Forest Service outlines various potential designations for these roads in the draft Blackfoot Travel Plan. Alternative 3 proposes decommissioning or closing most of these roads. The Proposed Action (Alternative 2) would designate unauthorized roads in this area as either motorized trail for vehicles less than 50 inches with seasonal restrictions or as open or seasonal roads that are stored. Alternative 2 also proposes to construct a new motorized trail in Township 15 North Range 6 West Section 3. Given the close proximity of roads proposed for motorized use to the Alice Creek Historic District (less than a mile from the southern boundary of the district), the NPS recommends consideration of potential noise impacts from motorized vehicles on the historic district in the final EIS.

If you have any questions regarding NPS comments, please contact Gail Gladstone, Cultural Resources Specialist, Lewis and Clark National Historic Trail, at 402-661-1858 or at Gail\_Gladstone@nps.gov.

Sincerely,

Robert F. Stewart

Regional Environmental Officer

cc: Amber Kamps, Lincoln District Ranger